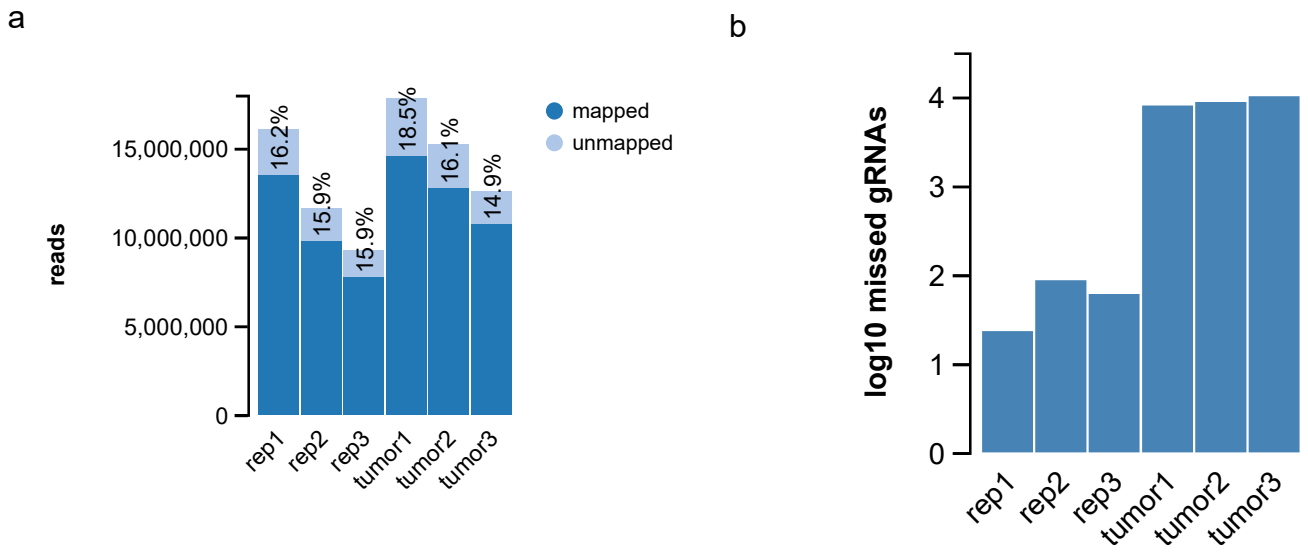
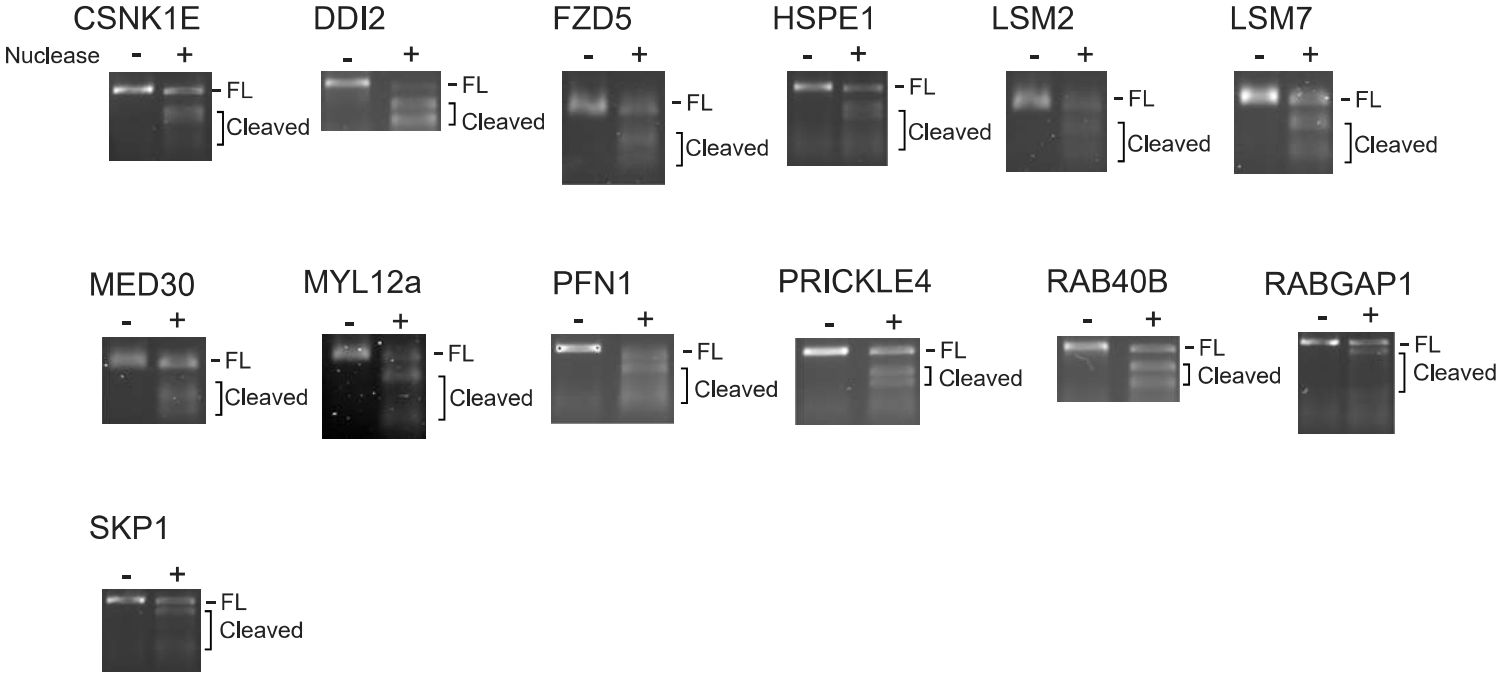
Supplemental Figure 1



a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Nuclease - +
FL
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DDI2
- +
FL
Cleaved
FZD5
- +
FL
Cleaved
HSPE1
- +
FL
Cleaved
LSM2
- +
FL
Cleaved
LSM7
- +
FL
Cleaved
MED30
- +
FL
Cleaved
MYL12a
- +
FL
Cleaved
PFN1
- +
FL
Cleaved
PRICKLE4
- +
FL
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RAB40B
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FL
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RABGAP1
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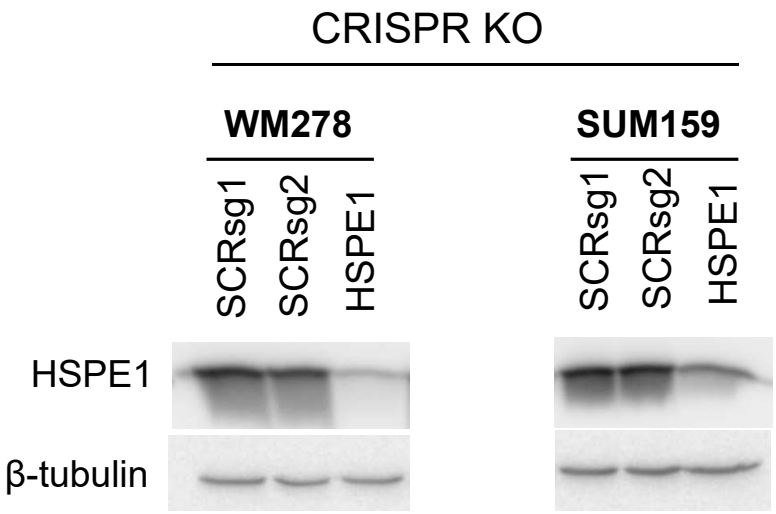
FL
Cleaved
SKP1
- +
FL
Cleaved

a)



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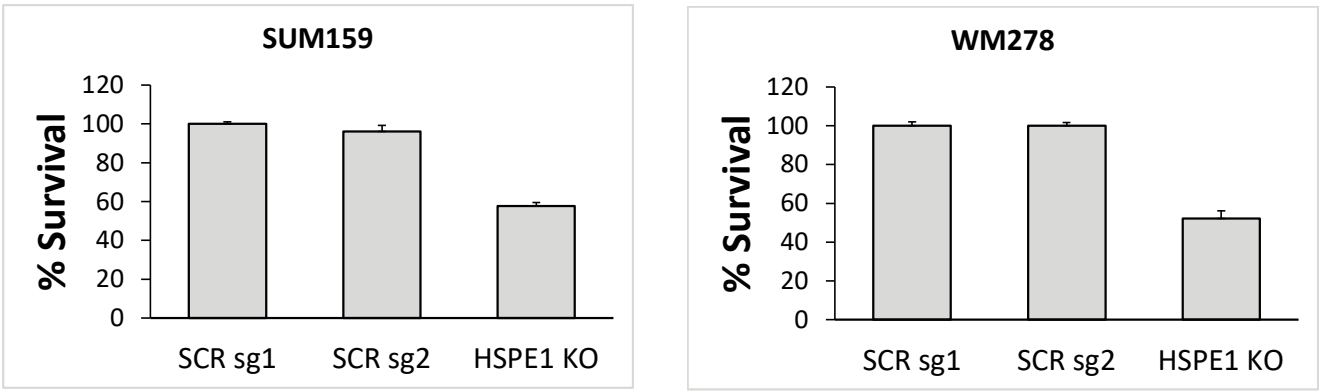
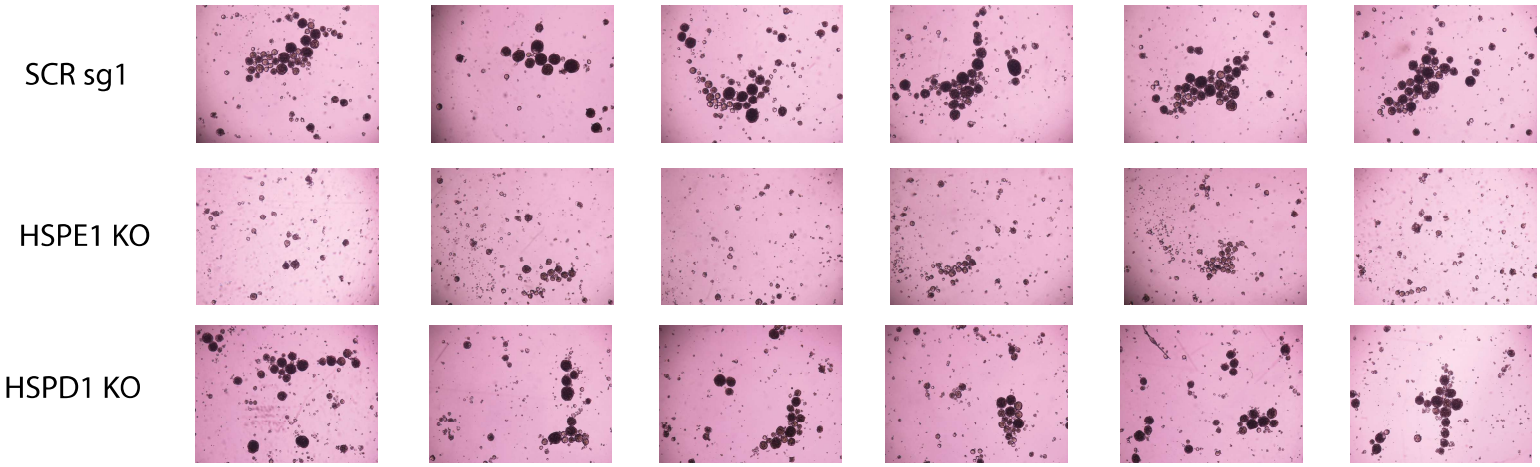
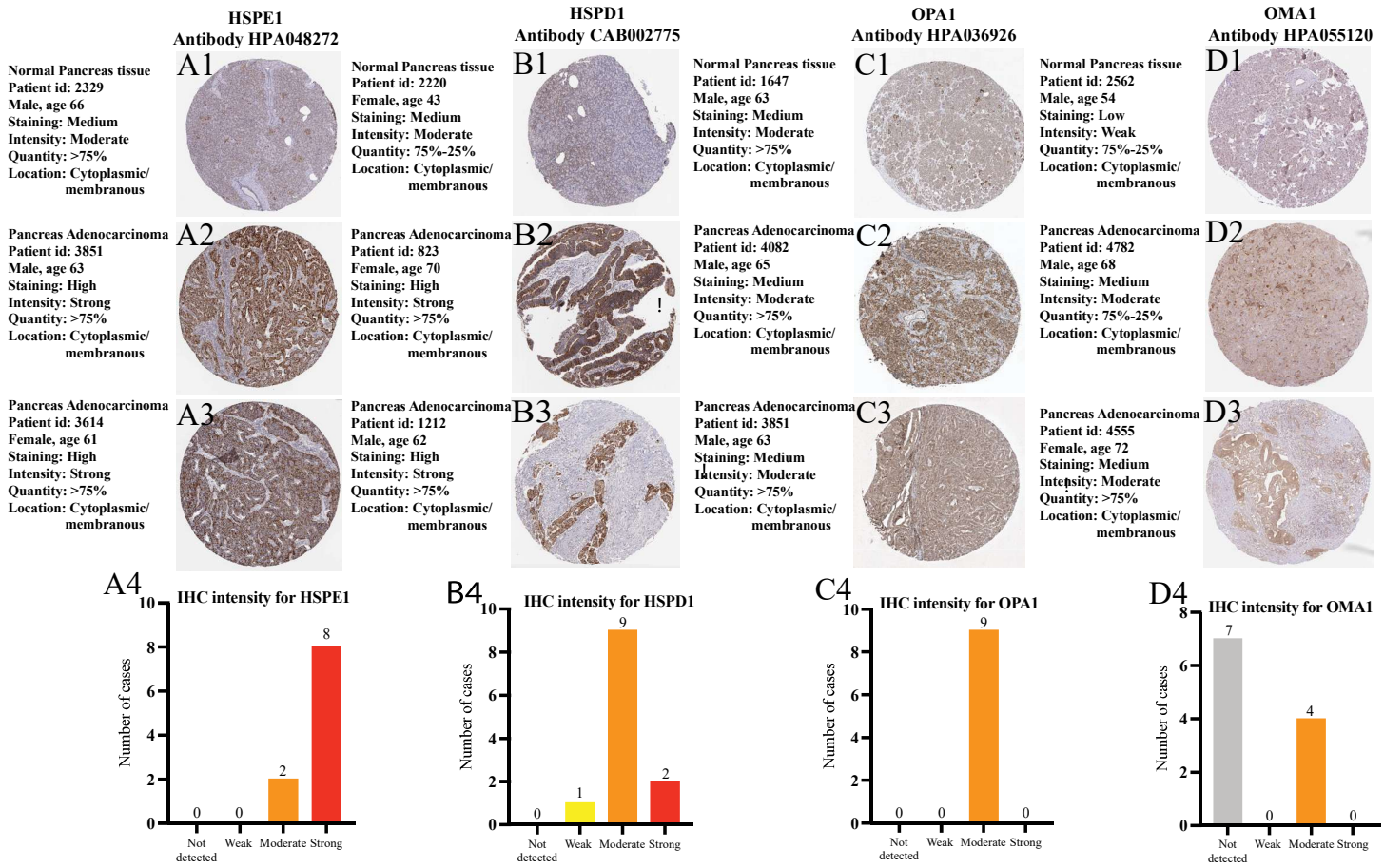


Supplemental Figure 3

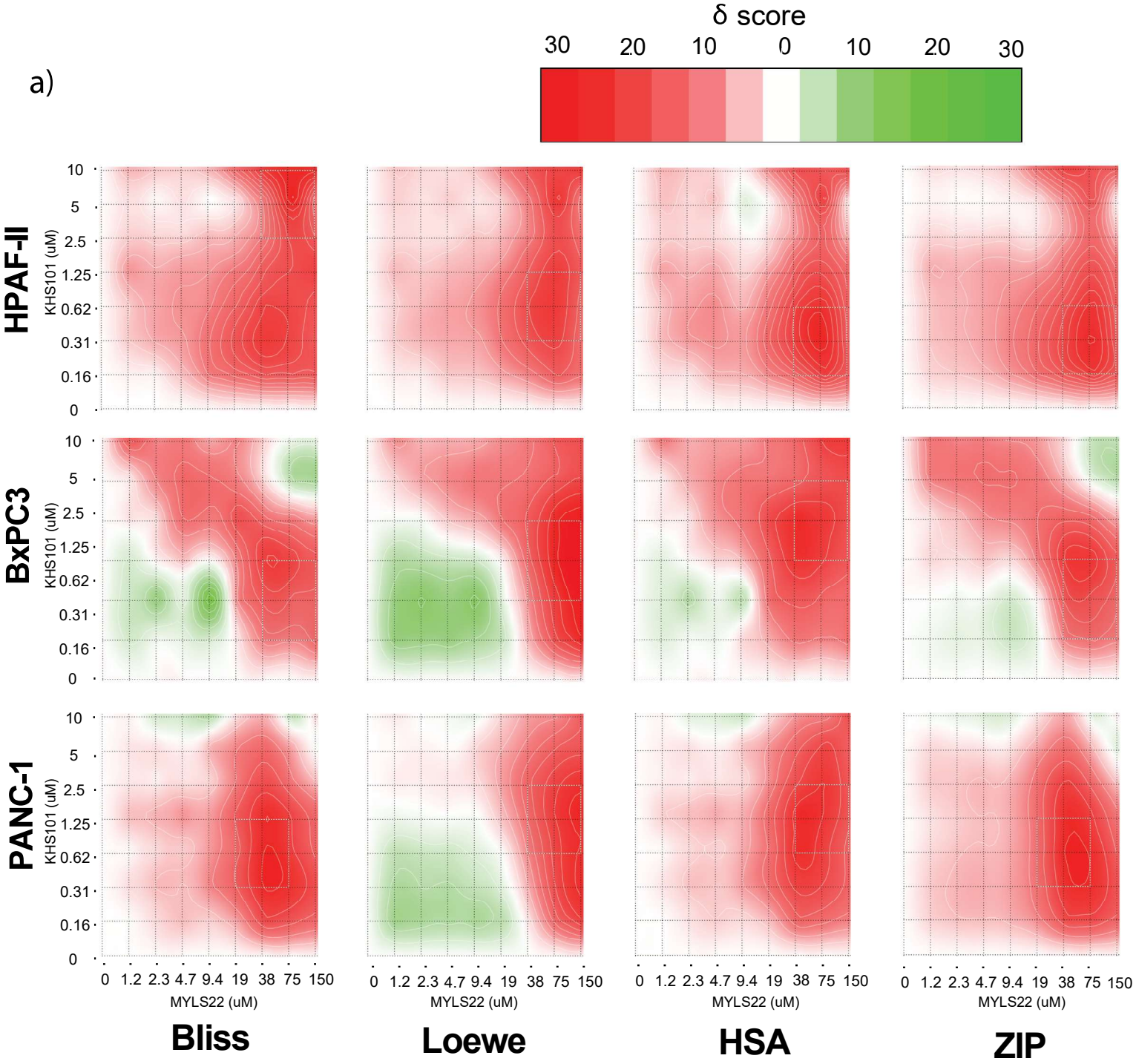
HPAF-II



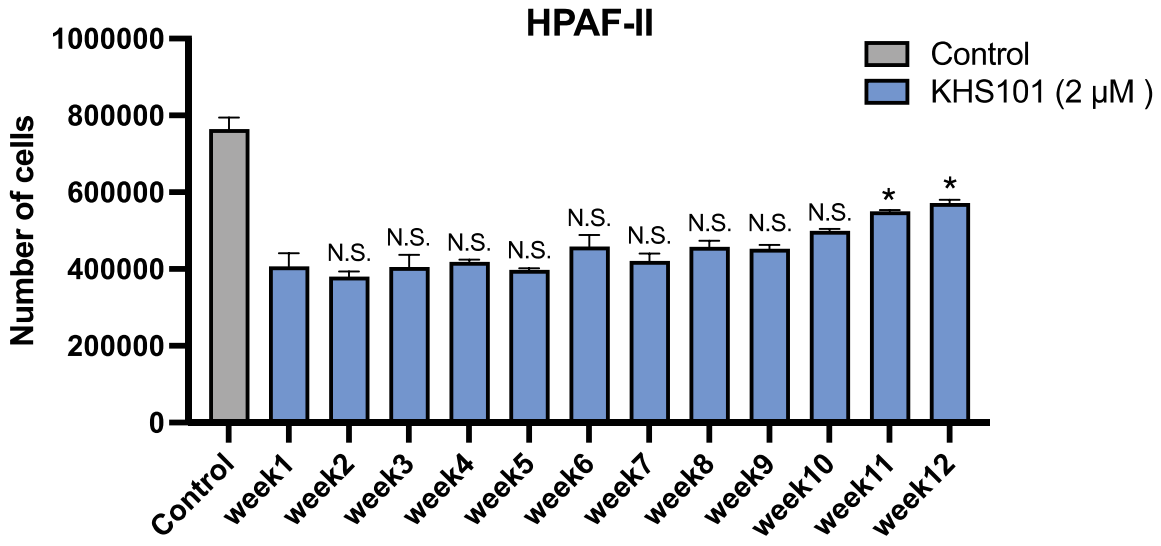
Supplemental Figure 4

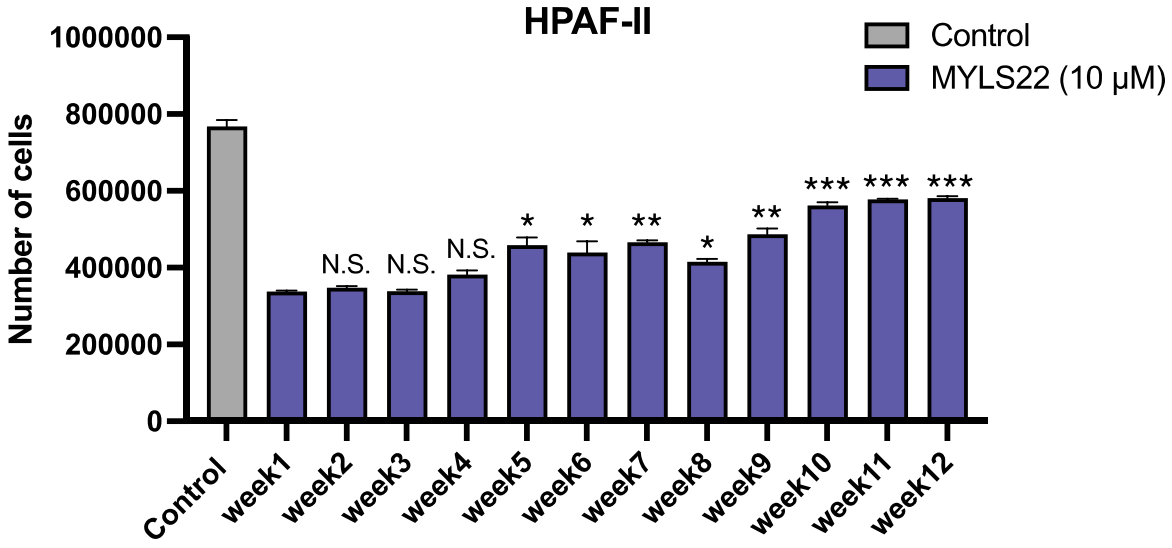


Supplemental Figure 5



Supplemental figure 6





Supplemental Figure 7

Correlated gene dependency	Correlation (r)	Z_score
SPC24	0.63	5.2
NUF2	0.6	4.9
RPLP2	0.58	4.8
SPC25	0.58	4.8
POLR2C	0.56	4.7
RPL24	0.56	4.7
SRSF3	0.56	4.6
NUTF2	0.55	4.6
HSPE1	0.56	4.6
UBL5	0.55	4.6

Supplemental Table 1

Prime Name	sgRNA primer sequence
Scramble_sg1	CACCGACGGAGGCTAAGCGTCGCAA
Scramble_sg2	CACCGCGCTTCCGCGGCCCGTTCAA
Scramble_sg1	AAACTTGCGACGCTTAGCCTCCGTC
Scramble_sg2	AAACTTGAACGGGCCGCGGAAGCGC
CCR5_sg_F	CACCGAGTTTACACCCGATCCACTG
CCR5_sg_R	AAACCAGTGGATCGGGTGTAAACTC
CSNK1E_sg_F	CACCGCGGGCTTGTCGTCAAACCGC
CSNK1E_sg_R	AAACGCGGTTTGACGACAAGCCCGC
DDI2_sg_F	CACCGGCTCGAAGTCGGCGTCGACC
DDI2_sg_R	AAACGGTCGACGCCGACTTCGAGCC
FZD5_sg_F	CACCGGGTGGGCACGCTCTTCCTGC
FZD5_sg_R	AAACGCAGGAAGAGCGTGCCCACCC
HSPE1_sg_F	CACCGTAAACGCTTGTCCTGCCTGT
HSPE1_sg_R	AAACACAGGCAGGACAAGCGTTTAC
LSM2_sg_F	CACCGTGTGTGTCGACCTCATCTGC
LSM2_sg_R	AAACGCAGATGAGGTCGACACACAC
LSM7_sg_F	CACCGCGTGGTGCTAATCTGCCCGC
LSM7_sg_R	AAACGCGGGCAGATTAGCACCACGC
MED30_sg_F	CACCGACGGCGTCGCTGTGCCGCAT
MED30_sg_R	AAACATGCGGCACAGCGACGCCGTC
MYL12A_sg_F	CACCGGGAACATGGTGAAATTGATG
MYL12A_sg_R	AAACCATCAATTTCACCATGTTCCC
PFN1_sg_F	CACCGTTTATACTTAGCCCCCACGG
PFN1_sg_R	AAACCCGTGGGGGCTAAGTATAAAC
PRICKLE4_sg_F	CACCGTCTGCAGGAGCGCTACTGCC
PRICKLE4_sg_R	AAACGGCAGTAGCGCTCCTGCAGAC
RAB40B_sg_F	CACCGCGAATGCACGGGCCGCCCGG
RAB40B_sg_R	AAACCCGGGCGGCCCGTGCATTCGC
RABGAP1_sg_F	CACCGCGTATGTTATTACGGGGAGC
RABGAP1_sg_R	AAACGCTCCCCGTAATAACATACGC
RSL24D1_sg_F	CACCGATGTAGTACTCACCTGCAAG
RSL24D1_sg_R	AAACCTTGCAGGTGAGTACTACATC
SKP1_sg_F	CACCGACTATTAAGACCATGTTGGA
SKP1_sg_R	AAACTCCAACATGGTCTTAATAGTC

sgRNA sequences for the generation of CRISPR-KO constructs

Supplemental Table 2

Primer name	PCR primer sequence
CCR5_surveyor_F	TAAAAAAGACCTCTCCCACCCCAC
CCR5_surveyor_R	GTCCTTCTCCTGAACACCTTCC
CSNK1E_surveyor_F	TGTTGCCTCCTTTTCTTGCCTCTC
CSNK1E_surveyor_R	AGCTCGTACCTCCCGTCTGT
DDI2_surveyor_F	CAGTAGCAAAGGGAGGGAGTG
DDI2_surveyor_R	GAGGGAGTGACTCACTGAGC
FZD5_surveyor_F	AGGTAGCAGGCCACCACAATG
FZD5_surveyor_R	TGTCGCTCACCTGGTTCCTG
HSPE1_surveyor_F	CAACAGCGACTACTGTTGCTTGC
HSPE1_surveyor_R	CCTAACAGACGTAAGGAATCGGG
LSM2_surveyor_F	CCCTGGGTGGTTAGAGGACA
LSM2_surveyor_R	CTCAAGAGAGGATAGCTGTTCCC
LSM7_surveyor_F	TTCCTGGAGGTCCCTCAGTC
LSM7_surveyor_R	GAATCCAGGTTTCCTCAGAAGGTC
MED30_surveyor_F	ATCCACGGGCCCCACGTAAA
MED30_surveyor_R	GCGGCCGCTGTTTTGAAATCG
MYL12A_surveyor_F	CCTCTCACTTACCAGTTGCTTCTTCATC
MYL12A_surveyor_R	GGTTCGTGTGTGTGTGTGTGTG
PFN1_surveyor_F	CCGGTCTTTGCCAACCAGGA
PFN1_surveyor_R	GCTTCTGCTTTTCCTGAAGGAGAG
PRICKLE4_surveyor_F	GAAGGGGAATTTGGGGGGAG
PRICKLE4_surveyor_R	GCCTGTCAGGACCTGATTGATG
RAB40B_surveyor_F	ATTTTCTCGTAGCTCTGGAAGCCG
RAB40B_surveyor_R	AGAAACCCACGTTGAGGGGC
RABGAP1_surveyor_F	GGGGGTTAACTGTTGTTCACTCAC
RABGAP1_surveyor_R	GTGGTAGACTCACTTCCCCC
RSL24D1_surveyor_F	CCCATCTGTGGGGCTAACTTAAG
RSL24D1_surveyor_R	GCATAACTTGGGGGGATATGGAAC
SKP1_surveyor_F	CTCTCAAGCACCTTATGACAGGC
SKP1_surveyor_R	GCAGGCCTTAAAAGCTTCTGTTCC

Primer list for all Surveyor assays

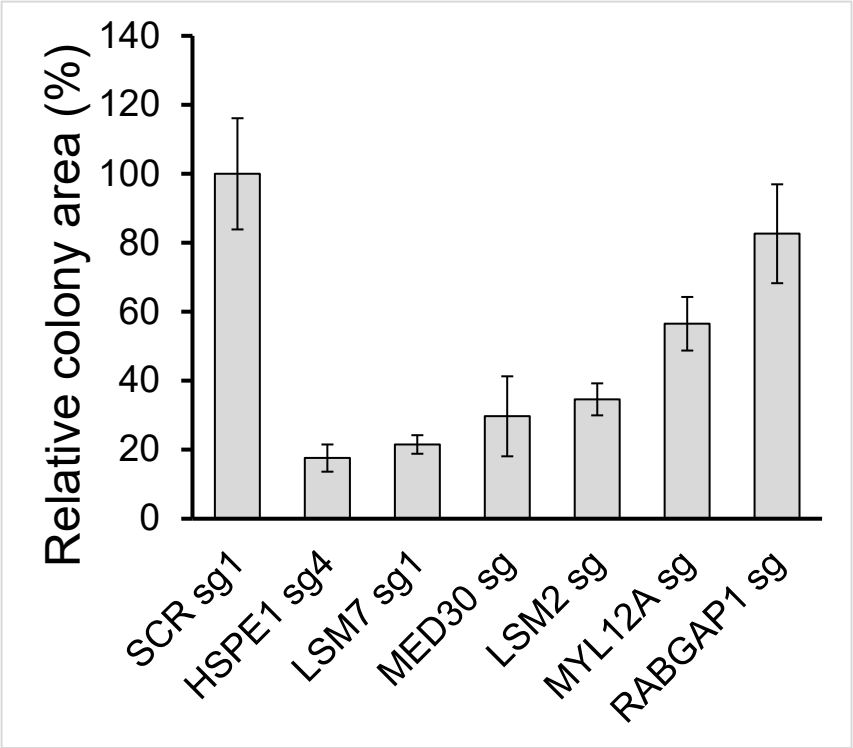
Supplemental Table 3

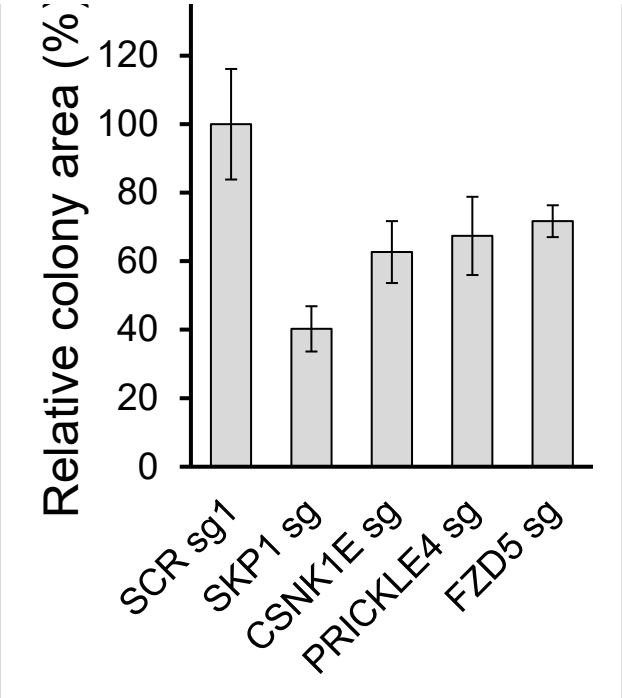
Figure 2g (Part 1)

Sample	colony area (%)		average Colony area (%)	relative colony area compared to control condition (%)	std (%)	t.test	Relative colony area (%)	Relative colony area (%)
scr sg1	82.56	68.94					122.30	102.13
	79.58	78.22					117.89	115.87
	73.02	68.1					108.17	100.88
	73.36	70.15					108.67	103.92
	78.29	72.7					115.98	107.70
	67.03	68.75					99.30	101.84
	62.7	46.37					92.88	68.69
	70.5	51.87					104.44	76.84
	57.42	45.53	67.51	100.00	16.12		85.06	67.45
hspe1 sg4	12.97	9.85					30.58	27.83
	13.07	14.3					33.88	34.53
	10.48	10.49	11.86	17.57	3.95	2.52E-11	25.75	25.52
lsm7 sg1	9.35	15.46					19.21	14.59
	17.42	17.83					19.36	21.18
	13.79	13.19	14.51	21.49	2.69	7.50E-11	15.52	15.54
med30 sg2	20.64	18.79					78.71	79.86
	22.87	23.31					78.28	79.88
	17.38	17.23	20.04	29.68	11.60	5.56E-10	57.36	56.16
lsm2 sg2	22.35	23.61					33.11	34.98
	27.22	26.73					40.32	39.60
	20.45	19.72	23.35	34.59	4.64	2.20E-09	30.29	29.21
MYL12A sg1	45.46	30.79					67.34	45.61
	42.7	37.6					63.25	55.70
	37.1	35.3	38.16	56.53	7.78	2.47E-06	54.96	52.29
RABGAP1 sg4	63.65	42.26					94.29	62.60
	66.89	56.96					99.09	84.38
	58.63	46.27	55.78	82.63	14.33	2.86E-02	86.85	68.54
skp1 sg3	21.4	23.13					31.70	34.26
	31.31	32.74					46.38	48.50
	26.25	28.17	27.17	40.24	6.61	1.35E-08	38.89	41.73
fzd5 sg1	53.13	53.91					13.85	22.90
	52.84	53.92					25.81	26.41
	38.72	37.91	48.41	71.71	4.65	6.90E-04	20.43	19.54
PRICKL4 sg1	45.68	35.39					67.67	52.43
	57.04	51.33					84.50	76.04
	41.29	42.22	45.49	67.39	11.43	1.55E-04	61.17	62.54
CSNK1E sg4	42.96	38.88					63.64	57.60
	49.26	49.03					72.97	72.63
	33.57	40.12	42.30	62.67	9.06	2.30E-05	49.73	59.43
RSL24D1 sg3	30.96	32.27					45.86	47.80
	35.12	35.09					52.03	51.98
	29.78	30.78	32.33	47.90	3.39	1.00E-07	44.12	45.60
PFN1 sg1	64.63	55.54					95.74	82.28
	65.86	54.76					97.56	81.12
	69.86	62.12	62.13	92.04	8.83	2.65E-01	103.49	92.02
DDI2 sg2	37.75	21.11					55.92	31.27
	36.96	22.34					54.75	33.09
	26.5	15.57	26.71	39.56	13.28	3.46E-08	39.26	23.06
RAB40 sg1	39.7	37.04					58.81	54.87
	47.92	42.09					70.99	62.35
	42.11	30.31	39.86	59.05	8.74	6.46E-06	62.38	44.90
CCR5 sg4	45.05	45.05					66.74	66.74
	53.31	33.07					78.97	48.99
	33.12	21.98	38.60	57.18	16.71	1.29E-05	49.06	32.56

Figure 2g (Part 2)

Sample	average Colony area (%)	relative colony area compared to control condition (%)	std (%)	t.test
SCR sg1	67.505	100	16.12492	
HSPE1 sg4	11.86	17.57	3.95	2.52E-11
LSM7 sg1	14.51	21.49	2.69	7.5E-11
MED30 sg	20.04	29.68	11.60	5.56E-10
LSM2 sg	23.35	34.59	4.64	2.2E-09
MYL12A sg	38.16	56.53	7.78	2.47E-06
RABGAP1 sg	55.78	82.63	14.33	0.028628
SCR sg1	67.51	100.00	16.12	
SKP1 sg	27.17	40.24	6.61	1.35E-08
CSNK1E sg	42.30	62.67	9.06	2.3E-05
PRICKLE4 sg	45.49	67.39	11.43	0.000155
FZD5 sg	48.41	71.71	4.65	0.00069
SCR sg1	67.51	100.00	16.12	
DDI2 sg	26.71	39.56	13.28	3.46E-08
RSL24D1 sg	32.33	47.90	3.39	1E-07
CCR5 sg	37.31	55.26	17.94	2.53E-05
RAB40B sg	39.86	59.05	8.74	6.46E-06
PFN1 sg	62.13	92.04	8.83	0.265462




Relative colony area (%)
120
100
80
60
40
20
0
SCR sg1
SKP1 sg
CSNK1E sg
PRICKLE4 sg
FZD5 sg

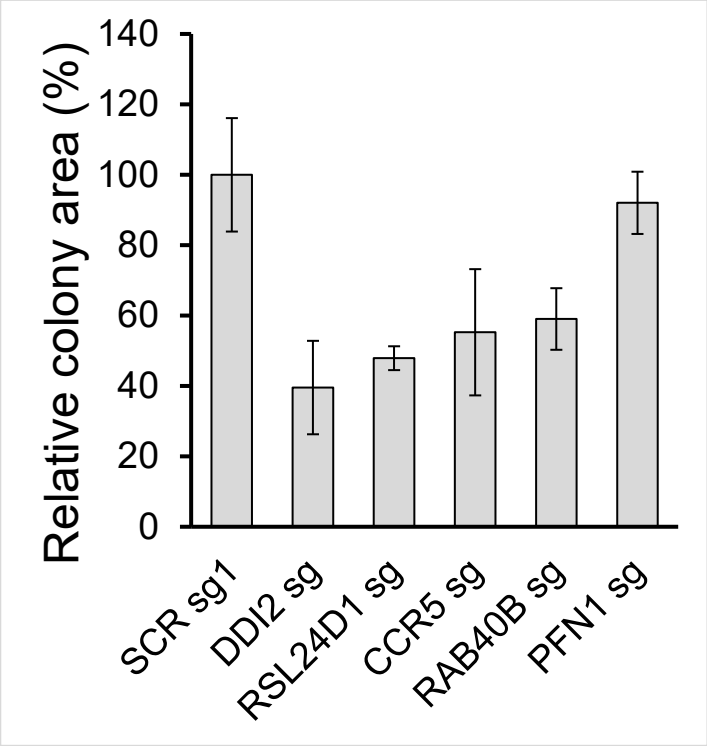

Relative colony area (%)
140
120
100
80
60
40
20
0
SCR sg1
DDI2 sg
RSL24D1 sg
CCR5 sg
RAB40B sg
PFN1 sg

Figure 3c

SRB

BxPC3

	scr				hspe1			
	rep1	rep2	2021 virus	2022 virus	rep1	rep2	2021 virus	2022 virus
	0.380333	0.346333	0.343333	0.286333	0.205333	0.206333	0.093333	0.033333
	0.354333	0.400333	0.376333	0.333333	0.171333	0.215333	0.048333	0.020333
Replicate 1	0.357333	0.365333	0.346333	0.302333	0.063333	0.144333	0.118333	0.040333
average	0.364	0.370667	0.355333	0.307333	0.146667	0.188667	0.086667	0.031333
	0.194167	0.329167	0.215167	0.210167	0.046167	0.049167	0.041167	0.042167
	0.159167	0.331167	0.207167	0.188167	0.055167	0.060167	0.044167	0.035167
Replicate 2	0.161167	0.252167	0.165167	0.203167	0.053167	0.058167	0.039167	0.048167
average	0.1715	0.304167	0.195833	0.2005	0.0515	0.055833	0.0415	0.041833
	0.363833	0.570833	0.347833		0.220833	0.250833	0.088833	
	0.360833	0.638833	0.270833		0.196833	0.287833	0.098833	
	0.246833	0.634833	0.277833		0.176833	0.252833	0.122833	
	0.230833	0.622833	0.248833		0.203833	0.273833	0.160833	
	0.246833	0.668833	0.275833		0.216833	0.313833	0.145833	
Replicate 4	0.254833	0.600833	0.290833		0.213833	0.295833	0.154833	
average	0.284	0.622833	0.285333		0.204833	0.279167	0.128667	
	0.103667	0.447667	0.178667		0.132667	0.115667	0.050667	
	0.086667	0.392667	0.158667		0.148667	0.139667	0.038667	
	0.096667	0.424667	0.166667		0.124667	0.111667	0.060667	
	0.110667	0.371667	0.163667		0.152667	0.116667	0.055667	
	0.135667	0.369667	0.148667		0.086667	0.096667	0.049667	
Replicate 4	0.129667	0.413667	0.132667		0.095667	0.082667	0.035667	
	0.1105	0.403333	0.158167		0.1235	0.1105	0.0485	

Relative values

	scr				hspe1			
	rep1	rep2	2021 virus	2022 virus	rep1	rep2	2021 virus	2022 virus
	1.044872	0.934353	0.966229	0.93167	0.564103	0.556655	0.262664	0.10846
	0.973443	1.080036	1.059099	1.084599	0.470696	0.580935	0.136023	0.066161
Replicate 1	0.981685	0.985612	0.974672	0.983731	0.173993	0.389388	0.333021	0.131236
	1.132167	1.082192	1.098723	1.048213	0.269193	0.161644	0.210213	0.210308
	0.928086	1.088767	1.057872	0.938487	0.321672	0.197808	0.225532	0.175395
Replicate 2	0.939747	0.829041	0.843404	1.0133	0.31001	0.191233	0.2	0.240233
	1.281103	0.916511	1.219042		0.777582	0.402729	0.311332	
	1.27054	1.025689	0.949182		0.693075	0.462135	0.346379	
	0.869131	1.019267	0.973715		0.622653	0.405941	0.430491	
	0.812793	1	0.872079		0.717723	0.439657	0.563668	
	0.869131	1.073856	0.966706		0.763498	0.50388	0.511098	
	0.8973	0.964678	1.019276		0.752934	0.47498	0.54264	
	0.93816	1.109917	1.12961		1.200603	0.286777	0.320337	
	0.784314	0.973554	1.003161		1.3454	0.346281	0.244468	
	0.874811	1.052893	1.053741		1.128205	0.27686	0.383562	
	1.001508	0.921488	1.034773		1.381599	0.289256	0.351949	
	1.227753	0.916529	0.939937		0.784314	0.239669	0.314015	
	1.173454	1.02562	0.838778		0.865762	0.204959	0.225501	

All replicates

SCR	1	0.109028	2.47E-22
HSPE1	0.471605	0.385861	
4 biological replicates of 2021 virus condition			
SCR	1	0.096659	t.test
HSPE1	0.328494	0.229746	1.78E-19

Prestoblue

	scr				hspe1			
	rep1	rep2	2021 virus	2022 virus	rep1	rep2	2021 virus	2022 virus
	11538	29147	11565	11986	1630	-1167	-916	404
	10989	25452	12475	11435	1627	-1699	-559	1388
Replicate 1	11914	23757	9693	12158	1147	252	397	802
average	11480.33	26118.67	11244.33	11859.67	1468	-871.333	-359.333	864.6667
	7293	16592	2133		997	4290	250	
	3751	26192	5091		1614	4916	-1918	
	6027	23031	7679		2417	2706	-1541	
	7412	25699	7501		2755	3106	471	
	9098	26036	7453		7246	6252	2577	
	2896	29052	7373		4160	2519	-1646	
average	6079.667	24433.83	6205.167		3198.333	3965	-301	

Relative values

	scr				hspe1			
	rep1	rep2	2021 virus	2022 virus	rep1	rep2	2021 virus	2022 virus
	1.005023	1.115945	1.028518		0.141982	-0.04468	-0.08146	
	0.957202	0.974475	1.109448		0.141721	-0.06505	-0.04971	
Replicate 1	1.037775	0.909579	0.862034		0.09991	0.009648	0.035307	
	1.1996	0.679065	0.343773		0.164017	0.175583	0.040316	
	0.617002	1.071963	0.820472		0.265502	0.201203	-0.30907	
	0.991365	0.942593	1.237544		0.397582	0.110755	-0.24831	
	1.219173	1.051786	1.208858		0.453177	0.127126	0.075931	
	1.496491	1.065578	1.201123		1.191869	0.255882	0.415326	
	0.476369	1.189014	1.18823		0.684275	0.103102	-0.26524	

All replicates

SCR	1	0.243254	1.45E-15
HSPE1	0.149137	0.791116	
4 biological replicates of 2021 virus condition			
SCR	1	0.269161	t.test
HSPE1	0	0	1.16E-07

MiaPaCa2

SRB

	scr				hspe1			
	2000	1000	500	100	2000	1000	500	100
	1.115667	0.493667	0.466667	0.080667	0.546667	0.299667	0.102667	0.051667
	1.129667	0.579667	0.485667	0.062667	0.609667	0.297667	0.158667	0.034667
		0.591667	0.510667	0.086667		0.328667	0.185667	0.046667
		0.487667	0.427667	0.099667		0.260667	0.114667	0.042667
average	1.122667	0.538167	0.472667	0.082417	0.578167	0.296667	0.140417	0.043917

Relative values

	scr				hspe1			
	2000	1000	500	100	2000	1000	500	100
	0.993765	0.917312	0.987306	0.978766	0.486936	0.556829	0.217207	0.626896
	1.006235	1.077114	1.027504	0.760364	0.543052	0.553112	0.335684	0.420627
		1.099412	1.080395	1.051567		0.610715	0.392807	0.566229
		0.906163	0.904795	1.209302		0.48436	0.242595	0.517695
average	1	1	1	1	0.514994	0.551254	0.297073	0.532861

SCR	1	0.10464	t.test
HSPE1	0.468196	0.178922	3.12E-12

[redacted]

Prestoblue

	scr				hspe1			
	2000	1000	500	100	2000	1000	500	100
	34113.17	21089.17	21150.17	2504.167	15365.17	11899.17	3719.167	193.1667
	37270.17	21573.17	14825.17	1476.167	17727.17	11791.17	3300.167	1240.167
		19384.17	13390.17	1932.167		7927.167	2693.167	-464.833
		17871.17	13872.17	1257.167		6793.167	2965.167	625.1667
average	35691.67	19979.42	15809.42	1792.417	16546.17	9602.667	3169.417	398.4167

Relative values

	scr				hspe1			
	2000	1000	500	100	2000	1000	500	100
	0.955774	1.055545	1.337821	1.39709	0.430497	0.595571	0.23525	0.107769
	1.044226	1.07977	0.937743	0.823562	0.496675	0.590166	0.208747	0.691896
		0.970207	0.846974	1.077967		0.396767	0.170352	-0.25933
		0.894479	0.877462	0.701381		0.340008	0.187557	0.348784
average	1	1	1	1	0.463586	0.480628	0.200477	0.222279

SCR	1	0.186592	t.test
HSPE1	0.324336	0.359213	5.89E-09

PANC-1

SRB

	SCR			HSPE1		
	1000	500	100	1000	500	100
	0.6183	0.3083	0.0583	0.5203	0.2523	0.0503
	0.7053	0.3403	0.0893	0.4693	0.2833	0.0513
	0.6663	0.3573	0.0623	0.4803	0.2653	0.0713
	0.6913	0.4263	0.0653	0.4433	0.2803	0.0593
	0.6253	0.3903	0.0863	0.4303	0.2723	0.0573
	0.7193	0.3873	0.0753	0.4903	0.2873	0.0423
	0.6543	0.3683	0.0523	0.5093	0.2813	0.0593
	0.8193	0.3693	0.0863	0.5173	0.2523	0.0743
	0.6903	0.3173	0.0893	0.4813	0.2703	0.0513
average	0.687744	0.362744	0.073856	0.482411	0.271633	0.057411

Relative values

SCR			HSPE1		
1000	500	100	1000	500	100
0.899026	0.84991	0.789379	0.756531	0.695531	0.681059
1.025526	0.938126	1.209117	0.682376	0.780991	0.694599
0.968819	0.984991	0.843538	0.69837	0.731369	0.965398
1.00517	1.175208	0.884158	0.644571	0.77272	0.802919
0.909204	1.075964	1.168497	0.625668	0.750666	0.775839
1.045883	1.067694	1.019558	0.71291	0.792018	0.57274
0.951371	1.015315	0.708139	0.740537	0.775477	0.802919
1.191286	1.018072	1.168497	0.752169	0.695531	1.006018
1.003716	0.87472	1.209117	0.699824	0.745153	0.694599
1	1	1	0.701439	0.748828	0.777343

SCR	1	0.137229	t.test
HSPE1	0.742537	0.100682	1.66E-11

[redacted]

Prestoblue

	SCR			HSPE1		
	1000	500	100	1000	500	100
	20745.4	17926.4	4322.4	17314.4	15377.4	1280.4
	22190.4	20719.4	4809.4	18442.4	14475.4	3261.4
	31175.4	20253.4	5576.4	13200.4	13667.4	2090.4
	20596.4	10609.4	2250.4	21095.4	12635.4	5175.4
	32525.4	22170.4	599.4	19562.4	8488.4	2914.4
	27120.4	18398.4	4730.4	16087.4	12498.4	2492.4
	30845.4	17107.4	4489.4	20969.4	14507.4	4468.4
	25911.4	23200.4	7295.4	19005.4	14473.4	2681.4
	30442.4	21250.4	5934.4	17359.4	10098.4	2035.4
average	26839.18	19070.62	4445.289	18115.18	12913.51	2933.289

SCR			HSPE1		
1000	500	100	1000	500	100
0.772952	0.940001	0.972355	0.645117	0.80634	0.288035
0.826791	1.086456	1.081909	0.687145	0.759042	0.733676
1.161563	1.062021	1.254452	0.491833	0.716673	0.470251
0.767401	0.556322	0.506244	0.785993	0.662558	1.164244
1.211863	1.162542	0.134839	0.728875	0.445103	0.655615
1.010478	0.964751	1.064138	0.5994	0.655375	0.560683
1.149268	0.897055	1.009923	0.781298	0.76072	1.005199
0.965432	1.216552	1.641153	0.708122	0.758937	0.6032
1.134252	1.1143	1.334986	0.646793	0.529527	0.457878
1	1	1	0.674953	0.677142	0.659865

SCR	1	0.320987	t.test
HSPE1	0.670653	0.213297	2.54E-06

Figure 4d

												T.test compared to control	T.testKHS101 condition compared to relative untreated
		NTC											
		1	2	3	4	5	6	7	average	STD			
neg	PI+/AnexV-	2.84	2.38	5.83	3.42	3.19	3.43	3.77	3.55	1.02			
necrotic	PI+/AnexV+	49.2	40	50.5	49.8	33.1	36.5	35.4	42.07	6.99			
apoptotic	PI-/AnexV+	14.2	12.3	7.63	8.59	20.4	15.8	17.8	13.82	4.33			
viable	PI-/AnexV-	33.7	45.3	36.1	38.2	43.2	44.4	43	40.56	4.19			
		99.94	99.98	100.06	100.01	99.89	100.13	99.97					
		NTC KHS101											
		1	2	3	4	5	6	7	average	STD			
neg	PI+/AnexV-					2.92	4	4.96	3.96	0.83			0.49228719
necrotic	PI+/AnexV+					43.6	35.8	42.6	40.67	3.47			0.133614477
apoptotic	PI-/AnexV+					22.4	24.9	20.2	22.50	1.92			0.077160838
viable	PI-/AnexV-					31.1	35.3	32.2	32.87	1.78			0.007867697
		0	0	0	0	100.02	100	99.96					
		hsp10											
		1	2	3	4	5	6	7	average	STD			
	PI+/AnexV-	1.74	1.19	0.95	1.96	3.53	2.83	2.13	2.05	0.83	neg	0.01663853	
	PI+/AnexV+	48.2	47.7	48	45.4	44.4	42.9	46.5	46.16	1.86	necrotic	0.209895585	
	PI-/AnexV+	34.5	36	37.5	34.4	37.3	38.3	37.4	36.49	1.43	apoptotic	4.12397E-06	
	PI-/AnexV-	15.5	15.2	13.6	18.2	14.7	16	13.9	15.30	1.42	viable	1.42329E-06	
		99.94	100.09	100.05	99.96								
		hsp10 KHS101											
		1	2	3	4	5	6	7	average	STD			
neg	PI+/AnexV-					4.07	4.77	2.66	3.83	0.88			0.257606331
necrotic	PI+/AnexV+					46.9	46.2	47.8	46.97	0.65			0.137927579
apoptotic	PI-/AnexV+					34.8	36.1	36.4	35.77	0.69			0.039323017
viable	PI-/AnexV-					14.2	12.9	13.2	13.43	0.56			0.132210771
		0	0	0	0	99.97	99.97	100.06					
		hsp60											
		1	2	3	4	5	6	7	average	STD			
	PI+/AnexV-	0.93	1.39	1.46	4.45	3.25	9.1	5.15	3.68	2.67	neg	0.917998113	
	PI+/AnexV+	42.3	33.6	43.4	42.5	30.3	33.4	31	36.64	5.40	necrotic	0.159555998	
	PI-/AnexV+	22.5	25.9	21.8	14.1	21.1	18.2	20.3	20.56	3.41	apoptotic	0.011770561	
	PI-/AnexV-	34.2	39.2	33.4	39	45.4	39.3	43.6	39.16	4.08	viable	0.568271999	
		99.93	100.09	100.06	100.05	100.05	100	100.05					
		hsp60 KHS101											
		1	2	3	4	5	6	7	average	STD			
	PI+/AnexV-					3.57	5.29	5.08	4.65	0.77	neg	0.003269868	0.568789099
	PI+/AnexV+					58.4	49.2	54.7	54.10	3.78	necrotic	0.001912178	0.007907093
	PI-/AnexV+					19.4	23.5	20.3	21.07	1.76	apoptotic	0.00262522	0.477672143
	PI-/AnexV-					18.7	22	19.9	20.20	1.36	viable	0.305297873	0.001487159
		0	0	0	0	100.07	99.99	99.98					

		scr sg1								
		1	2						average	STD
neg	PI+/AnexV-	1.48	1.75				1.62	0.14	neg	
necrotic	PI+/AnexV+	36.1	32.9				34.50	1.60	necrotic	
apoptotic	PI-/AnexV+	17.6	15.4				16.50	1.10	apoptotic	
viable	PI-/AnexV-	44.8	50				47.40	2.60	viable	
		99.98	100.05	0	0	0				
		scr sg2								
		1	2	3	4	5	average	STD		
neg	PI+/AnexV-	2.51	1.58	3.08	6.08	4.01	3.45	1.53		0.17906
necrotic	PI+/AnexV+	33.8	36.3	29.3	31.3	24.8	31.10	3.93		0.471776
apoptotic	PI-/AnexV+	11.4	14.5	10.4	9.91	12.4	11.72	1.63		0.051038
viable	PI-/AnexV-	52.3	47.7	57.2	52.7	58.7	53.72	3.90		0.247199
		100.01	100.08	99.98	99.99	99.91				
		HSPE1sg4								
		1	2	3	4	5	average	STD		
neg	PI+/AnexV-	1.92	1.89	6.05	9.46	8.25	5.51	3.14		0.284365
necrotic	PI+/AnexV+	33.9	33	37.4	33.9	31.9	34.02	1.84		0.229911
apoptotic	PI-/AnexV+	30.1	29.2	20.2	20	21.6	24.22	4.48		0.003252
viable	PI-/AnexV-	34.1	35.9	36.4	36.7	38.2	36.26	1.32		0.000412
		100.02	99.99	100.05	90.6	99.95				
		HSPD1sg1								
		1	2	3	4	5	average	STD		
neg	PI+/AnexV-	3.72	2.81	7.56	2.8	4.75	4.33	1.77		0.475901
necrotic	PI+/AnexV+	41.8	30.2	29.3	27.7	28.7	31.54	5.19		0.896123
apoptotic	PI-/AnexV+	14.4	18.1	24.3	29.9	27.1	22.76	5.72		0.015823
viable	PI-/AnexV-	40	48.9	38.9	39.6	39.5	41.38	3.78		0.001895
		99.92	100.01	100.06	100	100.05				
		HSPD1sg3								
		1	2	3	4	5	average	STD		
neg	PI+/AnexV-	1.28	1.96	3.69	3.28	3.82	2.8	1.01		0.504278
necrotic	PI+/AnexV+	31	35.4	30.9	24.5	30.9	30.5	3.48		0.836515
apoptotic	PI-/AnexV+	16.4	14.4	16.7	20.7	16.4	16.9	2.06		0.004657
viable	PI-/AnexV-	51.3	48.2	48.7	51.5	48.9	49.7	1.39		0.111461
		99.98	99.96	99.99	99.98	100.02				

Figure 5 c-d

Cage-500	Jun.07 s.c.	Bx-PC3 (parental, P16)		Control	3 doses
I	Apr.04-5	5	May.24	10 mice	5mice /doses
II	Apr.05	5	May.24		
III	Apr.07-11	5	May.30		
IV	Apr.11-18-21	5	Jun.09		
V	Apr.21-25	5	Jun.13		

Cage-500	Jun.14 s.c	HPAF-II (panrental, P18)		Control	3 doses
VI	Apr.25	5	Jun.13	10 mice	5mice /doses
VII	Apr.25-27	5	Jun.15		
VIII	Apr.27-29	5	Jun.17		
IX	Apr.29	5	Jun.17		
X	Apr.29	5	Jun.17		

Date:	Jun.27		
Jun.07 s.c.	Bx-PC3 (parental, P16)		
mouse	length	width	mm^3
1	4.65	2.86	19.92
2	5.09	3.62	34.92
3	4.94	3	23.28
4	3.42	2.57	11.83
5	4.44	3.06	21.77
6	5.41	2.69	20.50
7	5.17	4.17	47.07
8	4.2	4.12	37.33
9	4.61	3.57	30.76
10	4.53	3.19	24.14
11	4.68	3.69	33.37
12	5.03	4.1	44.27
13	5.66	2.75	22.41
14	4.18	3.12	21.31
15	4.46	3.77	33.19
16	5.19	3.65	36.20
17	4.7	3.84	36.29
18	4.65	2.88	20.19
19	5.16	3.51	33.29
20	5.27	3.08	26.18
21	4.41	4.26	41.90
22	4.38	4.14	39.31
23	6.96	3	32.80
24	4.81	4.19	44.22
25	5.27	4.38	52.94
average			31.57
			10.00

Date:	Jun.27		
Jun.14s.c.	HPAF-II (panrental, P18)		
mouse	length	width	mm^3
26	3.91	2.82	16.28
27	4.03	3.53	26.29
28	3.8	2.73	14.83
29	4.39	3.45	27.36
30	3.95	2.8	16.21
31	4.08	2.88	17.72
32	3.22	2.14	7.72
33	4.49	2.95	20.46
34	4.67	3.04	22.60
35	3.89	2.89	17.01
36	4.15	3.65	28.95
37	3.98	3.6	27.01
38	4.13	3.54	27.10
39	4.79	3.48	30.37
40	3.91	2.69	14.81
41	2.91	2.64	10.62
42	3.05	2.67	11.38
43	3.72	3.57	24.82
44	3.93	3.38	23.51
45	3.56	2.3	9.86
46	4.18	2.98	19.44
47	3.95	3.42	24.19
48	3.74	2.88	16.24
49	4.3	2.96	19.73
50	4.37	3.22	23.72
average			19.93
			6.26

Date:	Jul.04		
Jun.07 s.c.	Bx-PC3 (parental, P16)		
mouse	length	width	mm^3
1	5.58	3.01	26.47
2	5.25	3.27	29.39
3	6.28	4.18	57.45
4	6	3.41	36.53
5	7.08	5.03	93.79
6	6.49	4.55	70.35
7	6.3	5.25	90.92
8	5.61	4.8	67.68
9	6.4	5.34	95.56
10	5.35	4.36	53.25
11	5.86	5.42	90.14
12	6.3	5.39	95.83
13	6.06	3.97	50.01
14	6.86	4.42	70.17
15	6.51	4.93	82.85
16	6.65	4.46	69.26
17	6.91	5.41	105.89
18	6.62	4.39	66.80
19	6.44	5.38	97.60
20	6.2	4.99	80.83
21	6.12	4.61	68.10
22	6	4.78	71.78
23	7.97	4.75	94.16
24	6.06	5.03	80.28
25	6.68	5.56	108.12
average			74.13
			22.18

Date:	Jul.04		
Jun.14s.c.	HPAF-II (panrental, P18)		
mouse	length	width	mm^3
26	6.45	5.01	84.77
27	6.6	4.23	61.83
28	6.5	3.72	47.10
29	6.44	5.19	90.83
30	6.17	5.6	101.31
31	5.5	4.59	60.67
32	6.39	4.12	56.79
33	5.85	5.08	79.05
34	6.25	5.26	90.54
35	6.79	4.42	69.46
36	7.05	4.94	90.08
37	6.66	5	87.18
38	6.26	5.26	90.69
39	6.49	5.38	98.36
40	6.43	4.5	68.18
41	6.75	4.47	70.62
42	6.88	4.12	61.15
43	5.7	4.15	51.40
44	6.97	4.45	72.27
45	5.64	4.79	67.76
46	5.94	5.35	89.02
47	5.76	5.2	81.55
48	5.96	3.58	40.00
49	6.78	4.46	70.62
50	7.46	5.25	107.66
average			75.55
			17.21

Bx-PC3	
mouse	weight
1	35.28
2	31.78
3	32.29
4	37.94
5	32.83
6	27.38
7	30.88
8	34.71
9	32.89
10	29.39
11	33.71
12	36.05
13	33.02
14	31.82
15	34.51
16	30.73
17	32.62
18	34.23
19	30.77
20	30.87
21	29.88
22	31.23
23	29.9
24	33.68
25	31.82

HPAF-II	
mouse	weight
26	31.93
27	32.47
28	26.49
29	34.59
30	29.04
31	33.7
32	32.11
33	33.15
34	35.27
35	31.24
36	33.85
37	34.39
38	28.18
39	28.75
40	30.1
41	26.05
42	26.95
43	28.92
44	25.41
45	27.56
46	26.06
47	25.78
48	24.03
49	25.2
50	22.24

		Bx-PC3					HPAF-II		
Control	73.63	#25	108.12	31.82	Control	74.48	#50	107.66	22.24
		#17	105.89	32.62			#30	101.31	29.04
		#19	97.60	30.77			#39	98.36	28.75
		#12	95.83	36.05			#29	90.83	34.59
		#9	95.56	32.89			#38	90.69	28.18
		#7	90.92	30.88			#31	60.67	33.7
		#13	50.01	33.02			#32	56.79	32.11
		#4	36.53	37.94			#43	51.40	28.92
		#2	29.39	31.78			#28	47.10	26.49
		#1	26.47	35.28			#48	40.00	24.03
dose-1	75.14	#23	94.16	29.9	dose-1	76.73	#27	61.83	32.47
		#5	93.79	32.83			#42	61.15	26.95
		#8	67.68	34.71			#36	90.08	33.85
		#18	66.80	34.23			#46	89.02	26.06
		#10	53.25	29.39			#47	81.55	25.78
dose-2	73.56	#11	90.14	33.71	dose-2	75.47	#37	87.18	34.39
		#15	82.85	34.51			#26	84.77	31.93
		#16	69.26	30.73			#35	69.46	31.24
		#21	68.10	29.88			#40	68.18	30.1
		#3	57.45	32.29			#45	67.76	27.56
dose-3	74.68	#20	80.83	30.87	dose-3	76.62	#33	79.05	33.15
		#24	80.28	33.68			#34	90.54	35.27
		#22	71.78	31.23			#44	72.27	25.41
		#6	70.35	27.38			#41	70.62	26.05
		#14	70.17	31.82			#49	70.62	25.2

Date:	Jun.27		
Jun.07 s.c.	Bx-PC3 (Control)		
mouse	length	width	mm^3
1	4.65	2.86	19.92
2	5.09	3.62	34.92
4	3.42	2.57	11.83
7	5.17	4.17	47.07
9	4.61	3.57	30.76
12	5.03	4.1	44.27
13	5.66	2.75	22.41
17	4.7	3.84	36.29
19	5.16	3.51	33.29
25	5.27	4.38	52.94
average			33.37
			12.13

Date:	Jun.27				
mouse	length	width	mm^3	average	
Jun.07 s.c.				p-value	
5	4.44	3.06	21.77		
8	4.2	4.12	37.33		
10	4.53	3.19	24.14		
18	4.65	2.88	20.19	27.25	average
23	6.96	3	32.80	0.2643	p-value
Jun.07 s.c.				6.66	STDEV.P
3	4.94	3	23.28		
11	4.68	3.69	33.37		
15	4.46	3.77	33.19		
16	5.19	3.65	36.20	33.59	average
21	4.41	4.26	41.90	0.9661	p-value
Jun.07 s.c.				6.04	STDEV.P
6	5.41	2.69	20.50		
14	4.18	3.12	21.31		
20	5.27	3.08	26.18		
22	4.38	4.14	39.31	30.30	average
24	4.81	4.19	44.22	0.6376	p-value
				9.68	STDEV.P

Date:	Jun.27		
Jun.14 s.c.	HPAF-II (Control)		
mouse	length	width	mm^3
28	3.8	2.73	14.83
29	4.39	3.45	27.36
30	3.95	2.8	16.21
31	4.08	2.88	17.72
32	3.22	2.14	7.72
38	4.13	3.54	27.10
39	4.79	3.48	30.37
43	3.72	3.57	24.82
48	3.74	2.88	16.24
50	4.37	3.22	23.72
average			20.61
			6.76

Date:	Jun.27				
mouse	length	width	mm^3	average	
Jun.14 s.c.				p-value	
27	4.03	3.53	26.29		
36	4.15	3.65	28.95		
42	3.05	2.67	11.38		
46	4.18	2.98	19.44	22.05	average
47	3.95	3.42	24.19	0.7158	p-value
Jun.14 s.c.				6.18	STDEV.P
26	3.91	2.82	16.28		
35	3.89	2.89	17.01		
37	3.98	3.6	27.01		
40	3.91	2.69	14.81	16.99	average
45	3.56	2.3	9.86	0.3399	p-value
Jun.14 s.c.				5.59	STDEV.P
33	4.49	2.95	20.46		
34	4.67	3.04	22.60		
41	2.91	2.64	10.62		
44	3.93	3.38	23.51	19.38	average
49	4.3	2.96	19.73	0.7099	p-value
				4.59	STDEV.P

Date:	Jul.04		
Jun.07 s.c.	Bx-PC3 (Control)		
mouse	length	width	mm^3
1	5.58	3.01	26.47
2	5.25	3.27	29.39
4	6	3.41	36.53
7	6.3	5.25	90.92
9	6.4	5.34	95.56
12	6.3	5.39	95.83
13	6.06	3.97	50.01
17	6.91	5.41	105.89
19	6.44	5.38	97.60
25	6.68	5.56	108.12
average			73.63
			31.93

Date:	Jul.04				
mouse	length	width	mm^3	average	
Jun.07 s.c.	Bx-PC3 (dose-6mg/kg)			p-value	
5	7.08	5.03	93.79		
8	5.61	4.8	67.68		
10	5.35	4.36	53.25		
18	6.62	4.39	66.80	75.14	average
23	7.97	4.75	94.16	0.9123	p-value
Jun.07 s.c.	Bx-PC3 (dose-3mg/kg)			16.21	STDEV.P
3	6.28	4.18	57.45		
11	5.86	5.42	90.14		
15	6.51	4.93	82.85		
16	6.65	4.46	69.26	73.56	average
21	6.12	4.61	68.10	0.9952	p-value
Jun.07 s.c.	Bx-PC3 (dose-1mg/kg)			11.56	STDEV.P
6	6.49	4.55	70.35		
14	6.86	4.42	70.17		
20	6.2	4.99	80.83		
22	6	4.78	71.78	74.68	average
24	6.06	5.03	80.28	0.9253	p-value
				4.83	STDEV.P

Date:	Jul.04		
Jun.14 s.c.	HPAF-II (Control)		
mouse	length	width	mm^3
28	6.5	3.72	47.10
29	6.44	5.19	90.83
30	6.17	5.6	101.31
31	5.5	4.59	60.67
32	6.39	4.12	56.79
38	6.26	5.26	90.69
39	6.49	5.38	98.36
43	5.7	4.15	51.40
48	5.96	3.58	40.00
50	7.46	5.25	107.66
average			74.48
			24.28

Date:	Jul.04				
mouse	length	width	mm^3	average	
Jun.14 s.c.	HPAF-II (dose-6mg/kg)			p-value	
27	6.6	4.23	61.83		
36	7.05	4.94	90.08		
42	6.88	4.12	61.15		
46	5.94	5.35	89.02	76.73	average
47	5.76	5.2	81.55	0.8310	p-value
Jun.14 s.c.	HPAF-II (dose-3mg/kg)			12.79	STDEV.P
26	6.45	5.01	84.77		
35	6.79	4.42	69.46		
37	6.66	5	87.18		
40	6.43	4.5	68.18	75.47	average
45	5.64	4.79	67.76	0.9160	p-value
Jun.14 s.c.	HPAF-II (dose-1mg/kg)			8.63	STDEV.P
33	5.85	5.08	79.05		
34	6.25	5.26	90.54		
41	6.75	4.47	70.62		
44	6.97	4.45	72.27	76.62	average
49	6.78	4.46	70.62	0.8151	p-value
				7.63	STDEV.P

Date:	Jul.06		
Jun.07 s.c.	Bx-PC3 (Control)		
mouse	length	width	mm^3
1	6.27	5.04	83.39
2	5.91	4.27	56.42
4	6.35	5.28	92.69
7	6.26	6	118.00
9	6.48	5.04	86.19
12	7.14	5.17	99.93
13	6.42	4.68	73.63
17	6.32	5.3	92.95
19	6.95	5.79	121.99
25	7.2	5.23	103.12
average			92.83
			18.62

Date:	Jul.06				
mouse	length	width	mm^3	average	
Jun.07 s.c.	Bx-PC3 (dose-6mg/kg)			p-value	
5	6.87	5.35	102.96		
8	5.35	4.45	55.47		
10	5.72	4.62	63.93		
18	7.81	3.23	42.66	79.76	average
23	8.06	5.63	133.77	0.4983	p-value
Jun.07 s.c.	Bx-PC3 (dose-3mg/kg)			33.68	STDEV.P
3	7.31	4.78	87.45		
11	6.12	5.82	108.54		
15	7	4.87	86.93		
16	6.96	4.27	66.45	85.89	average
21	6.78	4.75	80.10	0.4685	p-value
Jun.07 s.c.	Bx-PC3 (dose-1mg/kg)			13.63	STDEV.P
6	6.76	4.83	82.57		
14	7.29	5.16	101.63		
20	6.9	4.13	61.62		
22	7.24	5	94.77	80.84	average
24	5.97	4.51	63.58	0.2690	p-value
				16.10	STDEV.P

Date:	Jul.06		
Jun.14 s.c.	HPAF-II (Control)		
mouse	length	width	mm^3
28	7.8	5.3	114.72
29	7.96	5.21	113.13
30	6.49	5.9	118.29
31	7.34	4.71	85.26
32	7.89	5.18	110.85
38	7.96	6.04	152.05
39	7.09	5.82	125.75
43	7.06	5.46	110.20
48	7.77	5.59	127.13
50	8.47	5.39	128.84
average			118.62
			16.23

Date:	Jul.06				
mouse	length	width	mm^3	average	
Jun.14 s.c.	HPAF-II (dose-6mg/kg)			p-value	
27	7.13	4.93	90.74		
36	8.47	5.32	125.52		
42	7.78	4.37	77.79		
46	7.37	6.14	145.48	114.13	average
47	7.05	5.96	131.12	0.7583	p-value
Jun.14 s.c.	HPAF-II (dose-3mg/kg)			25.57	STDEV.P
26	8.88	6.11	173.58		
35	8.17	4.54	88.17		
37	7.69	3.64	53.35		
40	7.05	4.28	67.62	94.39	average
45	6.87	4.98	89.21	0.3174	p-value
Jun.14 s.c.	HPAF-II (dose-1mg/kg)			41.80	STDEV.P
33	6.77	5.32	100.33		
34	8.07	5.03	106.91		
41	7.74	5.09	105.00		
44	7.47	4.98	97.00	96.03	average
49	7.68	4.2	70.93	0.0247	p-value
				13.02	STDEV.P

Date:	Jul.08		
Jun.07 s.c.	Bx-PC3 (Control)		
mouse	length	width	mm^3
1	5.62	5.13	77.44
2	7.03	5.17	98.39
4	8.99	4.68	103.10
7	7.34	5.52	117.10
9	8.7	5.32	128.93
12	7.28	6.75	173.68
13	7.47	5.69	126.63
17	9.14	5.74	157.68
19	8.41	4.6	93.18
25	8.38	6.38	178.60
average			125.47
			32.94

Date:	Jul.08				
mouse	length	width	mm^3	average	
Jun.07 s.c.	Bx-PC3 (dose-6mg/kg)			p-value	
5	7.7	5.27	111.97		
8	7.24	4.78	86.61		
10	6.75	5.69	114.43		
18	8.03	4.36	79.93	103.61	average
23	8.57	5.28	125.10	0.1425	p-value
Jun.07 s.c.	Bx-PC3 (dose-3mg/kg)			17.31	STDEV.P
3	9.17	4.21	85.10		
11	7.21	4.6	79.88		
15	7.82	5.49	123.41		
16	8.44	4.29	81.33	97.58	average
21	7.74	5.4	118.18	0.0791	p-value
Jun.07 s.c.	Bx-PC3 (dose-1mg/kg)			19.10	STDEV.P
6	8.74	5.11	119.50		
14	8.13	4.77	96.86		
20	8.09	5.07	108.88		
22	7.69	4.28	73.76	98.23	average
24	7.27	4.92	92.14	0.0638	p-value
				15.51	STDEV.P

Date:	Jul.08		
Jun.14 s.c.	HPAF-II (Control)		
mouse	length	width	mm^3
28	9.36	5.2	132.52
29	9.6	6.21	193.84
30	8.8	6.29	182.30
31	8.87	6.68	207.24
32	10.04	6.2	202.08
38	9.23	5.66	154.82
39	8.34	5.97	155.64
43	7.89	6.16	156.76
48	8.31	6.39	177.66
50	9.37	5.94	173.11
average			173.60
			22.56

Date:	Jul.08				
mouse	length	width	mm^3	average	
Jun.14 s.c.	HPAF-II (dose-6mg/kg)			p-value	
27	9.2	4.35	91.15		
36	9.44	4.76	111.99		
42	9.24	4.9	116.16		
46	8.87	6.19	177.95	135.73	average
47	7.74	6.69	181.38	0.1116	p-value
Jun.14 s.c.	HPAF-II (dose-3mg/kg)			36.88	STDEV.P
26	7.89	6.22	159.83		
35	9.15	4.86	113.16		
37	8.89	4.19	81.72		
40	8.08	4.28	77.50	107.29	average
45	7.39	5.19	104.23	0.0067	p-value
Jun.14 s.c.	HPAF-II (dose-1mg/kg)			29.48	STDEV.P
33	7.93	5.3	116.63		
34	8.47	6.37	179.95		
41	8.4	4.2	77.58		
44	8.8	4.95	112.90	124.64	average
49	8.95	5.39	136.14	0.0393	p-value
				33.49	STDEV.P

Date:	Jul.11		
Jun.07 s.c.	Bx-PC3 (Control)		
mouse	length	width	mm^3
1	8.45	5.34	126.16
2	8.5	5.67	143.08
4	10.77	5.68	181.93
7	8.76	5.67	147.46
9	10.04	6.2	202.08
12	9.22	6.98	235.20
13	9.06	6.11	177.10
17	9.65	6.11	188.63
19	10.16	5.68	171.63
25	10.42	6.42	224.87
average			179.81
			33.20

Date:	Jul.11				
mouse	length	width	mm^3	average	
Jun.07 s.c.	Bx-PC3 (dose-6mg/kg)			p-value	
5	10.05	6.91	251.26		
8	8.68	4.51	92.44		
10	8.87	5.25	128.01		
18	7.37	6.12	144.53	179.43	average
23	10.32	7.21	280.90	0.9924	p-value
Jun.07 s.c.	Bx-PC3 (dose-3mg/kg)			73.33	STDEV.P
3	9.17	5.65	153.27		
11	6.74	5.5	106.75		
15	9.08	5.8	159.93		
16	9.81	5.95	181.85	144.78	average
21	8.24	5.32	122.11	0.0744	p-value
Jun.07 s.c.	Bx-PC3 (dose-1mg/kg)			26.96	STDEV.P
6	8.49	6.37	180.38		
14	8.75	5.48	137.58		
20	8.66	5.42	133.20		
22	10.25	5.71	174.98	152.58	average
24	8.45	5.56	136.77	0.097861	p-value
				20.61	STDEV.P

Date:	Jul.11		
Jun.14 s.c.	HPAF-II (Control)		
mouse	length	width	mm^3
28	10.36	6.87	256.02
29	12.13	7.56	363.00
30	9.32	6.55	209.36
31	10.61	6.78	255.37
32	12.93	7.13	344.17
38	12.21	6.47	267.62
39	11.86	7.4	340.05
43	10.03	5.67	168.84
48	10.92	6.2	219.79
50	11.96	5.88	216.51
average			264.07
			61.98

Date:	Jul.11				
mouse	length	width	mm^3	average	
Jun.14 s.c.	HPAF-II (dose-6mg/kg)			p-value	
27	11.46	5.15	159.15		
36	11.39	6.4	244.28		
42	11.32	7.39	323.69		
46	11.8	6.83	288.22	269.99	average
47	10.37	7.85	334.59	0.8805	p-value
Jun.14 s.c.	HPAF-II (dose-3mg/kg)			63.78	STDEV.P
26	9.65	6.96	244.76		
35	11.07	5.73	190.31		
37	10.39	5.27	151.09		
40	10.43	5.33	155.14	174.40	average
45	9.71	5.07	130.69	0.0095	p-value
Jun.14 s.c.	HPAF-II (dose-1mg/kg)			40.07	STDEV.P
33	10.48	6.67	244.12		
34	10.54	6.33	221.13		
41	10.92	5.99	205.15		
44	10.99	6.48	241.63	218.76	average
49	11.86	5.41	181.75	0.0790	p-value
				23.35	STDEV.P

Date:	Jul.13		
Jun.07 s.c.	Bx-PC3 (Control)		
mouse	length	width	mm^3
1	9.27	5.46	144.70
2	10.17	6.2	204.69
4	13.01	6.01	246.05
7	8.49	6.66	197.18
9	9.14	6.42	197.25
12	9.41	6.62	215.93
13	10.65	6.41	229.12
17	11.15	6.06	214.40
19	10.71	5.76	186.05
25	9.66	6.7	227.05
average			206.24
			26.57

Date:	Jul.13				
mouse	length	width	mm^3	average	
Jun.07 s.c.	Bx-PC3 (dose-6mg/kg)			p-value	
5	10.13	6.8	245.26		
8	8.75	4.75	103.37		
10	8.01	5.63	132.94		
18	8.83	5.3	129.87	172.48	average
23	10.01	6.92	250.98	0.3505	p-value
Jun.07 s.c.	Bx-PC3 (dose-3mg/kg)			62.63	STDEV.P
3	9.44	5.64	157.23		
11	6.18	5.29	90.55		
15	9.17	5.95	169.98		
16	9.76	6.44	211.94	149.83	average
21	8.34	5.23	119.45	0.0514	p-value
Jun.07 s.c.	Bx-PC3 (dose-1mg/kg)			41.85	STDEV.P
6	8.77	6.41	188.67		
14	8.84	5.12	121.34		
20	9.25	5.15	128.46		
22	10.18	5.7	173.18	145.99	average
24	7.23	5.59	118.29	0.0094	p-value
				29.13	STDEV.P

Date:	Jul.13		
Jun.14 s.c.	HPAF-II (Control)		
mouse	length	width	mm^3
28	13.36	6.92	334.98
29	14.05	7.73	439.58
30	11.83	7.52	350.28
31	13.63	7.74	427.54
32	14.83	7.12	393.64
38	14.38	9.58	691.02
39	12.76	5.9	232.57
43	11.73	6.97	298.37
48	10.51	7.72	327.97
50	13.72	7.1	362.13
average			385.81
			116.93

Date:	Jul.13				
mouse	length	width	mm^3	average	
Jun.14 s.c.	HPAF-II (dose-6mg/kg)			p-value	
27	11.88	6.27	244.54		
36	13.76	7.5	405.27		
42	13.14	6.85	322.83		
46	12.73	8.05	431.94	382.93	average
47	12.08	8.98	510.06	0.9627	p-value
Jun.14 s.c.	HPAF-II (dose-3mg/kg)			91.46	STDEV.P
26	10.35	8.63	403.61		
35	11.66	6.4	250.07		
37	10.96	6.41	235.79		
40	11.54	5.4	176.19	261.88	average
45	10.95	6.52	243.73	0.0427	p-value
Jun.14 s.c.	HPAF-II (dose-1mg/kg)			75.60	STDEV.P
33	10.34	7.04	268.33		
34	11.13	6.86	274.25		
41	11.6	5.95	215.03		
44	12.14	6.61	277.73	251.12	average
49	13.04	5.68	220.28	0.0076	p-value
				27.54	STDEV.P

Date:	Jul.15		
Jun.07 s.c.	Bx-PC3 (Control)		
mouse	length	width	mm^3
1	8.8	6.62	201.93
2	8.35	7	214.23
4	13.08	6.59	297.42
7	8.46	7.87	274.36
9	11.08	6.09	215.17
12	10.19	6.51	226.12
13	9.24	7.36	262.08
17	11.13	6.7	261.60
19	11.04	6.72	261.04
25	12.09	7.35	341.98
average			255.59
			40.95

Date:	Jul.15				
mouse	length	width	mm^3	average	
Jun.07 s.c.	Bx-PC3 (dose-6mg/kg)			p-value	
5	10.68	6.03	203.33		
8	9.09	6.44	197.39		
10	9.05	6.18	180.98		
18	11.1	7.71	345.49	236.35	average
23	11.23	6.58	254.58	0.5810	p-value
Jun.07 s.c.	Bx-PC3 (dose-3mg/kg)			59.86	STDEV.P
3	11.03	5.36	165.92		
11	7.33	6.71	172.80		
15	10.07	6.59	228.98		
16	10.31	6.73	244.50	193.52	average
21	9.07	5.72	155.38	0.0235	p-value
Jun.07 s.c.	Bx-PC3 (dose-1mg/kg)			36.06	STDEV.P
6	8.84	6.99	226.15		
14	9.73	6.53	217.24		
20	10.09	6.67	235.04		
22	10.21	5.51	162.30	205.77	average
24	9.08	6.29	188.10	0.0242	p-value
				26.85	STDEV.P

Date:	Jul.15		
Jun.14 s.c.	HPAF-II (Control)		
mouse	length	width	mm^3
28	14.77	8.14	512.42
29	14.5	8.23	514.24
30	11.88	7.76	374.57
31	14.89	8.4	550.11
32	16.56	8.47	622.05
38	16.5	8.51	625.66
39	14.47	9.7	712.87
43	11.77	7.57	353.16
48	11.93	8.67	469.55
50	16.77	8.34	610.75
average			534.54
			108.36

Date:	Jul.15				
mouse	length	width	mm^3	average	
Jun.14 s.c.	HPAF-II (dose-6mg/kg)			p-value	
27	13.66	7.88	444.12		
36	14.82	9.87	755.93		
42	14.37	7.61	435.74		
46	14.46	9.08	624.22	579.21	average
47	13.66	9.43	636.02	0.5507	p-value
Jun.14 s.c.	HPAF-II (dose-3mg/kg)			122.73	STDEV.P
26	13.17	8.88	543.76		
35	13.14	6.91	328.51		
37	12.5	7.67	385.03		
40	13.65	7.08	358.26	384.67	average
45	11.76	7.07	307.78	0.0224	p-value
Jun.14 s.c.	HPAF-II (dose-1mg/kg)			83.75	STDEV.P
33	11.65	8.19	409.16		
34	13.34	8.16	465.09		
41	13.07	6.69	306.29		
44	13.73	7.64	419.62	388.34	average
49	13.05	7.07	341.55	0.0075	p-value
				56.96	STDEV.P

Date:	Jul.18		
Jun.07 s.c.	Bx-PC3 (Control)		
mouse	length	width	mm^3
1	9.32	6.42	201.13
2	9.99	7.47	291.88
4	13.21	7.28	366.58
7	9.23	6.21	186.37
9	11.09	7.45	322.29
12	11.42	8.76	458.85
13	11.61	7.24	318.65
17	12.19	7.66	374.51
19	12.02	7.44	348.38
25	13.95	8.65	546.52
average			341.52
			102.32

Date:	Jul.18				
mouse	length	width	mm^3	average	
Jun.07 s.c.	Bx-PC3 (dose-6mg/kg)			p-value	
5	14.1	9.34	644.04		
8	10.3	5.81	182.05		
10	9.7	6.87	239.71		
18	11.86	5.98	222.07	341.87	average
23	12.61	7.99	421.51	0.9970	p-value
Jun.07 s.c.	Bx-PC3 (dose-3mg/kg)			172.03	STDEV.P
3	11.26	7.16	302.25		
11	8.52	6.02	161.67		
15	11.31	7.72	352.94		
16	11.15	7.63	339.88	279.90	average
21	9.12	7.13	242.76	0.2352	p-value
Jun.07 s.c.	Bx-PC3 (dose-1mg/kg)			70.41	STDEV.P
6	8.15	7.15	218.16		
14	10.71	7.32	300.48		
20	9.92	7.14	264.79		
22	11.3	5.67	190.21	234.67	average
24	9	6.51	199.71	0.0193	p-value
				41.73	STDEV.P

Date:	Jul.20		
Jun.07 s.c.	Bx-PC3 (Control)		
mouse	length	width	mm^3
1	10.47	6.66	243.16
2	11.14	6.93	280.12
4	14.79	8.24	525.80
7	8.84	7.33	248.69
9	11.41	7.58	343.26
12	11.58	8.12	399.78
13	12.96	8.27	464.10
17	13.6	8.32	492.93
19	12.64	7.55	377.26
25	12.19	9.42	566.38
average			394.15
			110.23

Date:	Jul.20				
mouse	length	width	mm^3	average	
Jun.07 s.c.	Bx-PC3 (dose-6mg/kg)			p-value	
5	13.08	8.63	510.07		
8	11.42	6.63	262.84		
10	8.55	7.98	285.08		
18	11.67	6.96	296.00	377.76	average
23	12.78	8.94	534.82	0.4047	p-value
Jun.07 s.c.	Bx-PC3 (dose-3mg/kg)			118.87	STDEV.P
3	12.76	7.14	340.60		
11	8.82	6.98	225.00		
15	11.4	8.49	430.25		
16	12.09	7.15	323.62	312.91	average
21	10.91	6.55	245.08	0.0943	p-value
Jun.07 s.c.	Bx-PC3 (dose-1mg/kg)			73.46	STDEV.P
6	11.44	7.85	369.12		
14	11.13	6.96	282.30		
20	10.53	7.01	270.93		
22	12.36	6.85	303.67	296.06	average
24	10.26	6.88	254.29	0.0480	p-value
				39.90	STDEV.P

Date:	Jul.22		
Jun.07 s.c.	Bx-PC3 (Control)		
mouse	length	width	mm^3
1	10.35	7.29	288.00
2	9.98	7.71	310.63
4	14	8.57	538.38
7	9.44	7.75	296.88
9	11.47	7.97	381.49
12	11.45	8.82	466.38
13	12.23	9.11	531.45
17	12.78	8.57	491.46
19	13.3	8.57	511.46
25	16.06	9.49	757.32
average			457.34
			137.09

Date:	Jul.22				
mouse	length	width	mm^3	average	
Jun.07 s.c.	Bx-PC3 (dose-6mg/kg)			p-value	
5	14.15	8.95	593.47		
8	12.03	8.36	440.23		
10	10.1	8.8	409.53		
18	13.56	7.05	352.89	462.14	average
23	12.72	8.79	514.59	0.4739	p-value
Jun.07 s.c.	Bx-PC3 (dose-3mg/kg)			83.89	STDEV.P
3	12.22	7.71	380.35		
11	8.68	7.5	255.65		
15	13.36	9.38	615.48		
16	12.87	8.15	447.60	423.19	average
21	13.82	7.59	416.86	0.3319	p-value
Jun.07 s.c.	Bx-PC3 (dose-1mg/kg)			116.20	STDEV.P
6	9.74	8.27	348.79		
14	12.18	8.41	451.06		
20	11.13	7.87	360.95		
22	12.86	6.72	304.07	362.73	average
24	11.09	7.75	348.77	0.0933	p-value
				48.24	STDEV.P

	HPAF-II			
	Control	6 mg/kg	3 mg/kg	1 mg/kg
13	20.61067	22.05082	16.99496	19.38224
20	74.48029	76.72716	75.46734	76.61815
22	118.62	114.13	94.39	96.03
24	173.60	135.73	107.29	124.64
27	264.07	269.99	174.40	218.76
29	385.81	382.93	261.88	251.12
31	534.54	579.21	384.67	388.34

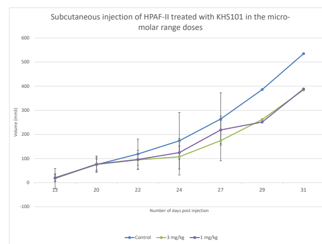
STD

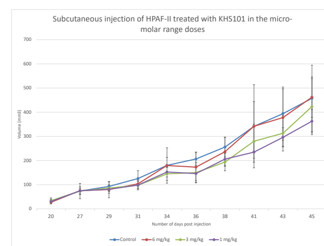
	HPAF-II			
	Control	6 mg/kg	3 mg/kg	1 mg/kg
13	6.758207	6.176879	5.593183	4.591961
20	24.28183	12.78526	8.630476	7.625217
22	16.23	25.56911	41.80232	13.02221
24	22.56	36.87926	29.48061	33.49058
27	61.98	63.7766	40.07193	23.35261
29	116.93	91.46057	75.60257	27.54239
31	108.36	122.7328	83.75429	56.96449

	BxPC3			
Number o	Control	6 mg/kg	3 mg/kg	1 mg/kg
20	33.36978	27.24531	33.58861	30.30032
27	73.63327	75.13543	73.55927	74.68334
29	92.83	79.76	85.89	80.84
31	125.47	103.61	97.58	98.23
34	179.81	179.43	144.78	152.58
36	206.24	172.48	149.83	145.99
38	255.59	236.35	193.52	205.77
41	341.52	341.87	279.90	234.67
43	394.15	377.76	312.91	296.06
45	457.34	462.14	423.19	362.73

STD

BxPC3			
Control	6 mg/kg	3 mg/kg	1 mg/kg
12.1342	6.661553	6.041149	9.682622
31.92684	16.2102	11.56463	4.831072
18.62	33.68018	13.62549	16.10275
32.94	17.31123	19.10152	15.51461
33.20	73.32641	26.96488	20.61452
26.57	62.63386	41.84739	29.13283
40.95	59.86155	36.06218	26.85297
102.32	172.035	70.41126	41.73481
110.23	118.872	73.45658	39.90208
137.09	83.88536	116.2033	48.2408





Date (2024)	**Aug.06 s.c.**	**Sept.03**					
HPAFII CRISPRko							
Ex vivo	SCRsg2		Ex vivo	OMAsg3		Ex vivo	OPAsg3
mouse	weight (mg)		mouse	weight (mg)		mouse	weight (mg)
#1	142.4		#11	261		#11	128
#2	330.6		#12	291.8		#12	226.6
#3	303.3		#13	290.1		#13	163
#4	347		#14	186		#14	316.4
#5	270.5		#15	217.4		#15	185.6
#6	441.6		#16	282.2		#16	178.7
#7	335.1		#17	123.8		#17	204.2
#8	641		#18	222.8		#18	461.6
#9	284.9		#19	260.4		#19	335.2
#10	229.2		Average	237.28		Average	244.37
Average	332.56		P-value	0.031		P-value	0.064

Figure 6e

Cage(600)	DOB	amount	7 weeks	User
XXIII	Jun.10	5	Jul.29	Julien
XXIV	Jun.10	5	Jul.29	Julien
XXV	Jun.10	5	Jul.29	Julien
XXVI	Jun.10	5	Jul.29	Julien
XXVII	Jun.12	5	Jul.31	Julien
XXVIII	Jun.12-24	3	0731-0812	Julien

	XXIII	XXIV	XXV	XXVI	XXVII	XXVIII	Total
SCR sg2	5				2	3	10
OMA-1sg3		5		1	3		9
OPA-1sg3			5	4			9
ear marker	#1-5	#11-15	#24-28	#19&20-23	#9-10&16-18	#6-8	28

42.15232	23.19136	28.89118
53.70354	36.42203	39.84285
75.83497	41.34242	50.41472
96.40079	60.83166	68.8168
126.892	76.03789	83.56477
200.7291	122.6091	120.4115
349.0013	215.2745	212.3723
13.07073	10.74275	3.02963
17.4796	6.560793	7.973865
13.0128	9.927437	11.33636
22.89419	19.31916	13.60977
36.80065	17.40422	23.61133
50.84948	27.31497	34.34696
95.55294	48.98991	46.11478

$mm^3=(4/3)*\pi*(Length/2)*(width/2)^2$

Date (2024)	Aug.14 (day 8)		
Aug.06 s.c.	HPAFII CRISPRko SCRsg2		
mouse	length	width	volume $(mm)^3$
#1	4.05	3.38	24.23
#2	4.72	3.84	36.44
#3	4.18	3.49	26.66
#4	6.27	3.29	35.54
#5	5.34	3.97	44.07
#6	4.53	3.78	33.89
#7	5.1	4.8	61.52
#8	4.96	4.96	63.89
#9	4.43	4.2	40.92
#10	6.49	4	54.37
Average			42.15
STDev			13.07072747

Date (2024)	Aug.14 (day 8)		
Aug.06 s.c.	HPAFII CRISPRko OMAsg3		
mouse	length	width	volume $(mm)^3$
#11	5.1	3.49	32.53
#12	4.19	2.58	14.60
#13	3.98	3.98	33.01
#14	3.57	2.98	16.60
#15	3.65	2.56	12.52
#16	3.26	2.44	10.16
#17	4.22	3.09	21.10
#18	3.69	3.51	23.80
#19	4.44	4.37	44.40
Average			23.19
	P-value	0.004	10.74275048

Date (2024)	Aug.14 (day 8)		
Aug.06 s.c.	HPAFII CRISPRko OPAsg3		
mouse	length	width	volume $(mm)^3$
#20	3.83	3.61	26.13
#21	4.22	3.54	27.69
#22	4.01	3.75	29.53
#23	4.96	3.48	31.45
#24	4.46	3.88	35.16
#25	5.88	3.15	30.55
#26	4.05	3.51	26.13
#27	4.46	3.5	28.61
#28	4.32	3.31	24.78
Average			28.89
	P-value	0.014	3.02963004

Date (2024)	Aug.16		
Aug.06 s.c.	HPAFII CRISPRko SCRsg2		
mouse	length	width	volume $(mm)^3$
#1	5.81	3.29	32.93
#2	5.84	4.09	51.15
#3	6	3.36	35.47
#4	6.33	4.18	57.91
#5	4.83	3.51	31.16
#6	6.01	4.28	57.64
#7	5.91	5.26	85.62
#8	5.58	5.25	80.53
#9	4.67	4.66	53.10
#10	6.78	3.81	51.53
Average			53.70
			17.4796006

Date (2024)	Aug.16		
Aug.06 s.c.	HPAFII CRISPRko OMAsg3		
mouse	length	width	volume $(mm)^3$
#11	5.5	3.74	40.28
#12	7.04	2.82	29.31
#13	5.48	3.63	37.81
#14	4.53	4.03	38.52
#15	6.85	3.63	47.26
#16	4.95	2.96	22.71
#17	5.3	3.77	39.44
#18	5.53	3.57	36.90
#19	4.12	4.06	35.56
Average			36.42
	P-value	0.018	6.560792852

Date (2024)	Aug.16		
Aug.06 s.c.	HPAFII CRISPRko OPAsg3		
mouse	length	width	volume $(mm)^3$
#20	4.52	3.81	34.35
#21	4.99	4.48	52.44
#22	4.35	4.08	37.91
#23	4.66	3.47	29.38
#24	5.39	4	45.16
#25	5.83	3.66	40.89
#26	4.27	3.47	26.92
#27	5.08	4.21	47.14
#28	4.48	4.35	44.39
Average			39.84
	P-value	0.052	7.973864685

Date (2024)	Aug.19		
Aug.06 s.c.	HPAFII CRISPRko SCRsg2		
mouse	length	width	volume $(mm)^3$
#1	6.25	4.56	68.05
#2	6.01	5.22	85.75
#3	6.04	5.19	85.19
#4	6.72	4.93	85.52
#5	6.09	4.62	68.06
#6	5.61	5.07	75.51
#7	6.22	5.52	99.24
#8	6.07	4.95	77.87
#9	5.33	4.5	56.51
#10	5.88	4.29	56.66
Average			75.83
			13.0127994

Date (2024)	Aug.19		
Aug.06 s.c.	HPAFII CRISPRko OMAsg3		
mouse	length	width	volume $(mm)^3$
#11	5.72	4.08	49.86
#12	6.17	4.2	56.99
#13	5.7	4.24	53.65
#14	5.05	4.09	44.23
#15	4.92	3.52	31.92
#16	5.41	3.34	31.60
#17	4.53	3.94	36.82
#18	5.38	3.1	27.07
#19	4.84	3.97	39.94
Average			41.34
	P-value	0.0000111	9.927437218

Date (2024)	Aug.19		
Aug.06 s.c.	HPAFII CRISPRko OPAsg3		
mouse	length	width	volume $(mm)^3$
#20	4.18	3.89	33.12
#21	4.97	4.57	54.35
#22	4.93	3.9	39.26
#23	5.81	3.5	37.27
#24	5.58	4.54	60.22
#25	5.24	4.03	44.56
#26	4.87	4.72	56.81
#27	6.12	4.46	63.74
#28	4.98	4.97	64.41
Average			50.41
	P-value	0.00048	11.33636495

Date (2024)	Aug.22		
Aug.06 s.c.	HPAFII CRISPRko SCRsg2		
mouse	length	width	volume $(mm)^3$
#1	6.53	4.01	54.98
#2	6.19	5.41	94.86
#3	7.02	4.85	86.46
#4	6.74	5.36	101.39
#5	6.31	5.8	111.14
#6	6.73	5.15	93.46
#7	6.4	6.08	123.88
#8	6.57	6.36	139.15
#9	5.8	5.04	77.14
#10	6.23	5	81.55
Average			96.40
			22.89418898

Date (2024)	Aug.22		
Aug.06 s.c.	HPAFII CRISPRko OMAsg3		
mouse	length	width	volume $(mm)^3$
#11	6.89	5.33	102.49
#12	5.42	4.51	57.72
#13	6.05	4.94	77.30
#14	5.3	4.92	67.17
#15	6.11	3.93	49.41
#16	5.24	4.16	47.48
#17	6.19	3.12	31.55
#18	5.71	4.08	49.77
#19	5.49	4.74	64.58
Average			60.83
	P-value	0.0029191	19.31916043

Date (2024)	Aug.22		
Aug.06 s.c.	HPAFII CRISPRko OPAsg3		
mouse	length	width	volume $(mm)^3$
#20	5.3	4.96	68.27
#21	5.72	4.3	55.38
#22	5.03	4.34	49.61
#23	6.06	4.3	58.67
#24	5.67	4.8	68.40
#25	6.72	4.36	66.89
#26	6.44	4.72	75.12
#27	6.1	5.55	98.38
#28	6.08	4.97	78.63
Average			68.82
	P-value	0.008018	13.60976793

Date (2024)	Aug.26		
Aug.06 s.c.	HPAFII CRISPRko SCRsg2		
mouse	length	width	volume $(mm)^3$
#1	7.3	4.4	74.00
#2	6.56	5.04	87.25
#3	6.51	4.87	80.84
#4	6.72	6.33	140.99
#5	6.44	5.86	115.79
#6	7.2	6.25	147.26
#7	7.67	6.98	195.66
#8	6.79	6.45	147.91
#9	7.01	6.6	159.88
#10	7.32	5.58	119.34
Average			126.89
			36.80064635

Date (2024)	Aug.26		
Aug.06 s.c.	HPAFII CRISPRko OMAsg3		
mouse	length	width	volume $(mm)^3$
#11	6.21	4.86	76.80
#12	4.34	4.17	39.51
#13	6.64	4.51	70.72
#14	5.78	5.14	79.96
#15	6.16	4.31	59.91
#16	5.76	5.34	86.00
#17	8.39	4.21	77.86
#18	6.78	5.43	104.67
#19	5.78	5.42	88.90
Average			76.04
	P-value	0.0025906	17.40421601

Date (2024)	Aug.26		
Aug.06 s.c.	HPAFII CRISPRko OPAsg3		
mouse	length	width	volume $(mm)^3$
#20	6.32	4.38	63.48
#21	6.78	4.57	74.14
#22	5.93	4.64	66.85
#23	7.15	5.51	113.66
#24	5.59	4.78	66.88
#25	6.08	4.86	75.19
#26	6.18	4.59	68.17
#27	6.58	6.28	135.88
#28	6.04	5.27	87.83
Average			83.56
	P-value	0.010264	23.61133224

Date (2024)	Aug.30		
Aug.06 s.c.	HPAFII CRISPRko SCRsg2		
mouse	length	width	volume $(mm)^3$
#1	9.02	5.56	146.00
#2	8.32	7.31	232.79
#3	8.87	6.15	175.66
#4	8.03	6.35	169.54
#5	7.5	6.31	156.36
#6	9.32	6.41	200.51
#7	8.94	8.46	335.02
#8	7.4	7.22	201.98
#9	8.03	6.65	185.93
#10	7.82	7.05	203.51
Average			200.73
			50.84947837

Date (2024)	Aug.30		
Aug.06 s.c.	HPAFII CRISPRko OMAsg3		
mouse	length	width	volume $(mm)^3$
#11	7.98	6.33	167.42
#12	7.46	5.1	101.60
#13	7.86	5.74	135.60
#14	7.2	5.01	94.63
#15	7.13	5.3	104.87
#16	5.95	5.36	89.50
#17	8.38	5.88	151.70
#18	8.67	5.77	151.14
#19	6.14	5.77	107.03
Average			122.61
	P-value	0.0012843	27.31496736

Date (2024)	Aug.30		
Aug.06 s.c.	HPAFII CRISPRko OPAsg3		
mouse	length	width	volume $(mm)^3$
#20	6.3	5.84	112.50
#21	7.14	6.55	160.39
#22	6.59	4.51	70.18
#23	7.39	6.06	142.10
#24	7.13	4.68	81.77
#25	7.06	5.2	99.96
#26	6.74	5.17	94.33
#27	8.2	6.21	165.58
#28	7.55	6.3	156.90
Average			120.41
	P-value	0.001424	34.34696308

Date (2024)	Sept.03		
Aug.06 s.c.	HPAFII CRISPRko SCRsg2		
mouse	length	width	volume $(mm)^3$
#1	11.17	6.24	227.73
#2	11.66	8.77	469.57
#3	11.68	7.39	333.99
#4	10.26	7.24	281.59

Date (2024)	Sept.03		
Aug.06 s.c.	HPAFII CRISPRko OMAsg3		
mouse	length	width	volume $(mm)^3$
#11	10.43	6.64	240.78
#12	8.88	6.55	199.48
#13	10.45	7.05	271.95
#14	9.45	5.27	137.42

Date (2024)	Sept.03		
Aug.06 s.c.	HPAFII CRISPRko OPAsg3		
mouse	length	width	volume $(mm)^3$
#20	9.4	5.86	169.01
#21	9.2	7.5	270.96
#22	8.57	6.68	200.23
#23	9.69	7.37	275.59

#5	7.81	7.31	218.52
#6	12	8	402.12
#7	11.23	9.23	500.94
#8	11.03	8.75	442.17
#9	10.17	7.98	339.10
#10	10.6	7.03	274.29
Average			349.00
			95.55294133

#15	10.94	5.94	202.11
#16	6.81	6.37	144.69
#17	10.96	6.37	232.86
#18	11.4	7	292.48
#19	9.15	6.71	215.71
Average			215.27
	P-value	0.0024991	48.98991382

#24	8.47	6.27	174.35
#25	9.78	5.64	162.89
#26	9.48	6.73	224.82
#27	10.45	7.02	269.64
#28	8.99	5.9	163.86
Average			212.37
	P-value	0.002049	46.11478274

Figure 6f

Cage-500	DOB	amount	7 weeks	User	Sum	Cage ID	30	6
LXVI	May.09	5	Jun.27	Julien		#052930		1
LXV	May.09	5	Jun.27	Julien		#052929		1
LIV	May.08-15	5	Jun.27-Jul.03	Julien		#050617		1
LV	May.15	5	Jul.03	Julien		#051001		1
LVI	May.15-18	5	Jul.03-06	Julien		#051002		1
LVII	May.16-18	5	Jul.06	Julien	30	#051390		1

HPAF II(Parental)	LXV	LXVI	LIV	LV	LVI	LVII
ear marker	#1-5	#6-10	#11-15	#16-20	#21-25	#26-30
Drug	MYLS22					

mm^3=(4/3)*π*(Length/2)*(width/2)^2			
Date (2023)	Aug.11		
Jul.21 s.c.	HPAF II parental		
mouse	length	width	volume $(mm)^3$
#1	5.14	4.99	67.01
#2	5.55	5.52	88.55
#3	6.03	3.92	48.52
#4	5.54	4.48	58.22
#5	5.45	5.13	75.10
#6	6.02	5.92	110.47
#7	6.64	5.34	99.14
#8	6.33	5.82	112.27
#9	6.71	5.9	122.30
#10	5.81	4.96	74.84
#11	5.56	4.59	61.33
#12	5.81	5.39	88.38
#13	5.63	4.7	65.12
#14	6.16	4.39	62.16
#15	5.29	4.77	63.02
#16	6.09	4.14	54.65
#17	5.72	4.45	59.31
#18	6.1	3.84	47.10
#19	5.49	5.1	74.77
#20	5.53	4.01	46.56
#21	5.64	4.47	59.01
#22	5.42	4.75	64.03
#23	5.67	4.81	68.69
#24	5.25	5.07	70.66
#25	5.65	4.41	57.53
#26	6.61	4.44	68.23
#27	6.39	4.9	80.33
#28	6.26	5.29	91.72
#29	5.42	4.84	66.48
#30	7.17	5.2	101.51
Average	73.57		

mm^3=(4/3)*π*(Length/2)*(width/2)^2			
Date (2023)	Aug.14		
Jul.21 s.c.	HPAF II parental		
mouse	length	width	volume $(mm)^3$
#1	7.75	6.03	147.55
#2	7.13	5.96	132.61
#3	7.58	5.96	140.98
#4	7.09	5.35	106.26
#5	6.67	5.94	123.22
#6	8.44	6.76	201.95
#7	7.8	6.21	157.50
#8	8.78	6	165.50
#9	7.01	6.71	165.26
#10	8.52	6.37	181.02
#11	6.91	5.16	96.33
#12	7.62	6.33	159.87
#13	7.46	6.04	142.50
#14	7.83	5.82	138.87
#15	6.51	6.14	128.50
#16	7.21	6	135.91
#17	7.5	6.15	148.53
#18	8.16	6.05	156.39
#19	7.14	6.59	162.36
#20	7.26	5.96	135.03
#21	6.62	5.23	94.81
#22	7.41	5.66	124.29
#23	7.23	6.08	139.94
#24	7.54	6.36	159.69
#25	7.36	6.21	148.61
#26	8.14	5.62	134.62
#27	8.2	5.62	135.61
#28	7.93	6	149.48
#29	8.15	5.92	149.55
#30	8.73	5.9	159.12
Average	144.06		

Removed mice			
#6	201.95	#4	106.26
#10	181.02	#11	96.33
#8	165.50	#21	94.81

#9	165.26
#19	162.36
#12	159.87
#24	159.69
#30	159.12
#7	157.50
#18	156.39
#29	149.55
#28	149.48
#25	148.61
#17	148.53
#1	147.55
#13	142.50
#3	140.98
#23	139.94
#14	138.87
#16	135.91
#27	135.61
#20	135.03
#26	134.62
#2	132.61
#15	128.50
#22	124.29
#5	123.22

Distribution								
Vehicle			Low dose			High dose		
Mouse	volume	weight	Mouse	volume	weight	Mouse	volume	weight
#9	165.26	34.24	#19	162.36	33.51	#12	159.87	37.34
#7	157.50	31.25	#24	159.69	33.42	#30	159.12	31.85
#18	156.39	31.15	#29	149.55	34.26	#28	149.48	31.48
#1	147.55	32.43	#25	148.61	33.39	#17	148.53	30.12
#23	139.94	36.63	#3	140.98	29.14	#13	142.50	34.05
#14	138.87	37.59	#22	124.29	34.25	#27	135.61	28.14
#20	135.03	34.2	#2	132.61	29.48	#5	123.22	30.4
#16	135.91	30.6						
#26	134.62	30.23						
#15	128.50	35.32						
Average	143.96	33.36		145.44	32.49		145.47	31.91

cage-1	cage-2
#1	#16
#7	#18
#9	#20
#14	#23
#15	#26

cage-3
#19
#22
#24
#25
#29

cage-5	cage-4
#2	#12
#3	#13
#5	#27
#17	#28
	#30

Date (2023)	Aug.14		
Jul.21 s.c.	HPAF II parental-vehicle		
mouse	length	width	volume $(mm)^3$
#1	7.75	6.03	147.55
#7	7.8	6.21	157.50
#9	7.01	6.71	165.26
#14	7.83	5.82	138.87
#15	6.51	6.14	128.50
#16	7.21	6	135.91
#18	8.16	6.05	156.39
#20	7.26	5.96	135.03
#23	7.23	6.08	139.94
#26	8.14	5.62	134.62
Average	143.96		

Date (2023)	Aug.14		
Jul.21 s.c.	HPAF II parental-10mg/kg		
mouse	length	width	volume $(mm)^3$
#2	7.13	5.96	132.61
#3	7.58	5.96	140.98
#19	7.14	6.59	162.36
#22	7.41	5.66	124.29
#24	7.54	6.36	159.69
#25	7.36	6.21	148.61
#29	8.15	5.92	149.55
Average	145.44		

Date (2023)	Aug.14		
Jul.21 s.c.	HPAF II parental-20mg/kg		
mouse	length	width	volume $(mm)^3$
#5	6.67	5.94	123.22
#12	7.62	6.33	159.87
#13	7.46	6.04	142.50
#17	7.5	6.15	148.53
#27	8.2	5.62	135.61
#28	7.93	6	149.48
#30	8.73	5.9	159.12
Average	145.47		

Date (2023)	Aug.16		
Jul.21 s.c.	HPAF II parental-vehicle		
mouse	length	width	volume $(mm)^3$
#1	8.81	6.72	208.31
#7	9.2	7.73	287.84
#9	8.31	7.5	244.75
#14	8.97	6.86	221.02
#15	7.06	5.51	112.23
#16	9.35	6.23	190.01
#18	9.86	6.88	244.37
#20	8.06	7.19	218.17
#23	7.6	7.3	212.06
#26	10.61	6.65	245.67
Average	218.44		

Date (2023)	Aug.16		
Jul.21 s.c.	HPAF II parental-10mg/kg		
mouse	length	width	volume $(mm)^3$
#2	8.21	4.55	88.99
#3	8.74	5.67	147.12
#19	8.68	6.91	217.01
#22	9.11	6.22	184.54
#24	9.08	6.97	230.97
#25	8	6.93	201.17
#29	10.07	7.54	299.76
Average	171.25		0.45

Date (2023)	Aug.16		
Jul.21 s.c.	HPAF II parental-20mg/kg		
mouse	length	width	volume $(mm)^3$
#5	8.25	6.23	167.66
#12	9.41	7.46	274.20
#13	7.41	5.89	134.60
#17	8.2	6.35	173.12
#27	9.45	5.92	173.41
#28	10.15	6.54	227.31
#30	10.2	7.04	264.69
Average	176.94		0.53

Date (2023)	Aug.18		
Jul.21 s.c.	HPAF II parental-vehicle		
mouse	length	width	volume $(mm)^3$
#1	10.59	6.9	263.99
#7	11.12	8.81	451.91
#9	9.44	7.87	306.14
#14	11.33	6.57	256.07
#15	8	6.69	187.47
#16	10.73	6.39	229.40
#18	11.35	6.56	255.74
#20	9.21	7.21	250.69
#23	9.79	7.62	297.64
#26	12.55	7.74	393.66
Average	289.27		

Date (2023)	Aug.18		
Jul.21 s.c.	HPAF II parental-10mg/kg		
mouse	length	width	volume $(mm)^3$
#2	9.25	6.1	180.22
#3	9.21	5.39	140.10
#19	8.12	6.91	203.01
#22	10.41	5.66	174.62
#24	9.51	7.83	305.28
#25	9.17	6.89	227.93
#29	10.84	7.55	323.54
Average	194.35		0.083

Date (2023)	Aug.18		
Jul.21 s.c.	HPAF II parental-20mg/kg		
mouse	length	width	volume $(mm)^3$
#5	7.95	5.86	142.94
#12	9.94	7.43	287.32
#13	8.5	6.73	201.58
#17	9.25	6.11	180.81
#27	10.19	5.79	178.87
#28	12.13	6.48	266.69
#30	10.37	7.49	304.61
Average	195.36		0.074

Date (2023)	Aug.21		
Jul.21 s.c.	HPAF II parental-vehicle		
mouse	length	width	volume $(mm)^3$
#1	12.96	8.92	539.92
#7	12.84	9.67	628.66
#9	11.19	9.11	486.26
#14	12.6	8.8	510.90
#15	10.99	9.01	467.14
#16	12.52	8.11	431.17
#18	12.79	8.67	503.39
#20	11.64	9.4	538.53
#23	11.23	9.45	525.10
#26	15.39	9.86	783.41
Average	541.45		

Date (2023)	Aug.21		
Jul.21 s.c.	HPAF II parental-10mg/kg		
mouse	length	width	volume $(mm)^3$
#2	11.55	7.2	313.51
#3	11.48	7.49	337.21
#19	9.88	8.63	385.28
#22	10.42	7.25	286.78
#24	12.46	8.62	484.76
#25	7.99	7.87	259.12
#29	13.7	9.98	714.46
Average	347.65		0.061

Date (2023)	Aug.21		
Jul.21 s.c.	HPAF II parental-20mg/kg		
mouse	length	width	volume $(mm)^3$
#5	10.08	7.59	304.05
#12	11.91	7.36	337.80
#13	10.56	7.35	298.70
#17	11.23	7.85	362.34
#27	11.64	6.94	293.54
#28	14.64	7.83	469.96
#30	15.1	9.39	697.12
Average	345.45		0.045

Date (2023)	Aug.23		
Jul.21 s.c.	HPAF II parental-vehicle		
mouse	length	width	volume $(mm)^3$

Date (2023)	Aug.23		
Jul.21 s.c.	HPAF II parental-10mg/kg		
mouse	length	width	volume $(mm)^3$

Date (2023)	Aug.23		
Jul.21 s.c.	HPAF II parental-20mg/kg		
mouse	length	width	volume $(mm)^3$

#1	13.12	9.31	595.43
#7	13.67	11.06	875.54
#9	11.55	10.39	652.85
#14	14.02	8.61	544.19
#15	11.42	9.69	561.45
#16	14.21	8.41	526.24
#18	12.49	9.39	576.62
#20	12.45	9.9	638.91
#23	11.37	11.12	736.15
#26	15.44	9.68	757.52
Average	646.49		

#2	12.29	7.32	344.80
#3	13.14	7	337.12
#19	10.06	9.28	453.62
#22	11.64	7.6	352.03
#24	13.95	10	730.42
#25	13.75	9.41	637.50
#29	15.2	9.83	769.04
Average	453.08		0.143

#5	11.16	7.31	312.25
#12	14.06	8.96	591.02
#13	10.98	7.49	322.53
#17	12.24	8.08	418.41
#27	13.69	7.78	433.87
#28	15.8	8.92	658.24
#30	15.3	9.18	675.11
Average	426.43		0.040

Date (2023)	**Aug.25**		
Jul.21 s.c.	HPAF II parental-vehicle		
mouse	length	width	volume $(mm)^3$
#1	14.66	10.42	833.43
#7	13.97	10.66	831.21
#9	12.73	11.57	892.26
#14	14.91	8.67	586.83
#15	11.95	9.95	619.46
#16	15.38	9.86	782.90
#18	14.36	10.36	807.00
#20	14.33	10.05	757.84
#23	12.43	11.27	826.64
#26	16.93	10.48	973.59
Average	791.12		

Date (2023)	**Aug.25**		
Jul.21 s.c.	HPAF II parental-10mg/kg		
mouse	length	width	volume $(mm)^3$
#2	13.14	8.05	445.85
#3	13.79	7.79	438.16
#19	12.4	10.67	739.18
#22	12.37	8.91	514.19
#24	13.31	11.17	869.53
#25	11.73	9.91	603.18
#29	15.8	11.16	1030.35
Average	580.08		0.204

Date (2023)	**Aug.25**		
Jul.21 s.c.	HPAF II parental-20mg/kg		
mouse	length	width	volume $(mm)^3$
#5	11.34	7.71	352.96
#12	15.28	9.45	714.47
#13	11.41	7.65	349.63
#17	12.12	8.07	413.28
#27	14.59	8.7	578.22
#28	17.34	9.69	852.50
#30	16.74	9.57	802.74
Average	507.98		0.043

Figure 8a (right panel)

Cage(600)	DOB	amount	7 weeks	User	Sum	Cage ID
III	0328-0404	5	May.16-23	Julien	HPAFII parental	#080712
IV	Apr.04	5	May.23	Julien		#081454
V	Apr.04	5	May.23	Julien		#081455
VI	Apr.04-05	5	May.24	Julien		#081456
VII	Apr.08	5	May.27	Julien		#081457
VIII	Apr.08	5	May.27	Julien		#081458
IX	Apr.08-10	5	May.29	Julien		#081459
X	Apr.10	5	May.29	Julien	40	#081757

$mm^3=(4/3)*\pi*(Length/2)*(width/2)^2$				$mm^3=(4/3)*\pi*(Length/2)*(width/2)^2$				$mm^3=(4/3)*\pi*(Length/2)*(width/2)^2$				$mm^3=(4/3)*\pi*(Length/2)*(width/2)^2$			
Date (2024)	Jun.04			Date (2024)	Jun.04			Date (2024)	Jun.04			Date (2024)	Jun.04		
May.24 s.c.	HPAFII parental			May.24 s.c.	HPAFII parental			May.24 s.c.	HPAFII parental			May.24 s.c.	HPAFII parental		
mouse	length	width	volume $(mm)^3$	mouse	length	width	volume $(mm)^3$	mouse	length	width	volume $(mm)^3$	mouse	length	width	volume $(mm)^3$
#1	5.25	4.18	48.03	#11	4.92	3.71	35.46	#21	4.75	4.54	51.26	#31	4.4	4.3	42.60
#2	5.38	4.08	46.89	#12	5.09	4.29	49.05	#22	4.07	3.62	27.93	#32	5.05	4.6	55.95
#3	6.19	3.48	39.25	#13	4.28	3.75	31.51	#23	4.32	4.02	36.55	#33	5.18	3.88	40.83
#4	5.85	4.17	53.26	#14	4.89	3.26	27.21	#24	5.14	4.06	44.36	#34	4.51	4	37.78
#5	4.58	3.62	31.43	#15	5.15	4.47	53.88	#25	4.29	3.7	30.75	#35	5.69	4.25	53.81
#6	5.85	3.9	46.59	#16	5.36	3.63	36.98	#26	4.33	3.71	31.21	#36	4.82	4.54	52.02
#7	4.61	4.38	46.31	#17	4.92	4.82	59.85	#27	5.01	4.75	59.19	#37	4.28	3.71	30.85
#8	4.83	4.61	53.75	#18	4.49	4.47	46.97	#28	4.7	4.22	43.82	#38	5.44	4.05	46.72
#9	5.02	4.68	57.57	#19	5.76	3.78	43.09	#29	4.5	4.27	42.96	#39	4.55	4.1	40.05
#10	4.36	3.6	29.59	#20	5.01	3.64	34.76	#30	4.7	3.46	29.46	#40	4.46	4.07	38.68

Date (2024)	Jun.04		
May.24 s.c.	HPAFII parental-control		
mouse	length	width	volume $(mm)^3$
#1	5.25	4.18	48.03
#3	6.19	3.48	39.25
#4	5.85	4.17	53.26
#5	4.58	3.62	31.43
#6	5.85	3.9	46.59
#10	4.36	3.6	29.59
#19	5.76	3.78	43.09
#23	4.32	4.02	36.55
#28	4.7	4.22	43.82
#32	5.05	4.6	55.95
Average		8.251277	42.76

Date (2024)	Jun.04		
May.24 s.c.	HPAFII parental-KHS101		
mouse	length	width	volume $(mm)^3$
#7	4.61	4.38	46.31
#13	4.28	3.75	31.51
#15	5.15	4.47	53.88
#16	5.36	3.63	36.98
#18	4.49	4.47	46.97
#25	4.29	3.7	30.75
#36	4.82	4.54	52.02
#39	4.55	4.1	40.05
Average		8.287873	42.31

Date (2024)	Jun.04		
May.24 s.c.	HPAFII parental-MYLS22		
mouse	length	width	volume $(mm)^3$
#2	5.38	4.08	46.89
#20	5.01	3.64	34.76
#21	4.75	4.54	51.26
#29	4.5	4.27	42.96
#33	5.18	3.88	40.83
#34	4.51	4	37.78
#35	5.69	4.25	53.81
#37	4.28	3.71	30.85
Average		7.458333539	42.39

Date (2024)	Jun.04		
May.24 s.c.	HPAFII parental-KHS101+MYLS22		
mouse	length	width	volume $(mm)^3$
#8	4.83	4.61	53.75
#11	4.92	3.71	35.46
#12	5.09	4.29	49.05
#24	5.14	4.06	44.36
#26	4.33	3.71	31.21
#31	4.4	4.3	42.60
#38	5.44	4.05	46.72
#40	4.46	4.07	38.68
Average		6.9098035	42.73

42.7566412	42.30905	42.39308	42.72779661
64.0854511	48.54166	49.71814	40.41886586
85.4733877	57.10781	48.23425	38.13971765
85.2866255	69.62362	56.90619	57.16425239
96.5699475	72.11134	70.49921	74.25839337
8.2512773	8.287873	7.458335	6.909803523
8.08987787	7.232052	13.47403	11.00665982
16.9252852	7.369307	12.68159	9.096274687
18.7867178	18.90069	9.52854	5.130859998
19.2868302	19.9135	19.21633	12.57508669

Date (2024)	Jun.06		
May.24 s.c.	HPAFII parental-control		
mouse	length	width	volume $(mm)^3$
#1	5.86	4.62	65.49
#3	5.68	4.23	53.21
#4	5.84	5.22	83.32
#5	5.47	4.59	60.34
#6	5.51	4.58	60.52
#10	5.3	4.96	68.27
#19	5.77	4.27	55.08
#23	5.31	4.68	60.90
#28	5.05	4.93	64.27
#32	5.57	4.88	69.45
Average		8.089878	64.09

Date (2024)	Jun.06		
May.24 s.c.	HPAFII parental-KHS101		
mouse	length	width	volume $(mm)^3$
#7	4.96	4.14	44.51
#13	4.63	4.42	47.36
#15	5.08	4.8	61.28
#16	4.92	4.5	52.17
#18	4.39	3.98	36.41
#25	5.54	4.34	54.64
#36	4.8	4.1	42.25
#39	4.86	4.42	49.71
Average		7.232052	48.54
		p-value	0.000967

Date (2024)	Jun.06		
May.24 s.c.	HPAFII parental-MYLS22		
mouse	length	width	volume $(mm)^3$
#2	4.5	4.21	41.76
#20	4.99	4.93	63.50
#21	5.26	5.21	74.76
#29	5.15	4.69	59.31
#33	5.22	4.05	44.83
#34	4.94	4.06	42.64
#35	4.46	3.9	35.52
#37	4.76	3.77	35.42
Average		13.474033	49.72
		p-value	0.030197

Date (2024)	Jun.06		
May.24 s.c.	HPAFII parental-KHS101+MYLS22		
mouse	length	width	volume $(mm)^3$
#8	5.13	4.29	49.43
#11	4.96	4.25	46.91
#12	5.4	2.81	22.33
#24	5.52	3.85	42.84
#26	4.21	3.77	31.33
#31	5.11	4.22	47.65
#38	5.73	3.04	27.73
#40	5.02	4.58	55.14
Average		11.00666	40.42
		p-value	0.000413

Date (2024)	Jun.08		
May.24 s.c.	HPAFII parental-control		
mouse	length	width	volume $(mm)^3$
#1	6.28	5.36	94.47
#3	5.76	4.97	74.50
#4	6.16	4.96	79.35
#5	6.73	5.57	109.33
#6	6.02	5.28	87.87
#10	6.29	5.68	106.25
#19	6.05	5.76	105.10
#23	5.21	5.16	72.63
#28	5.86	4.39	59.13
#32	5.07	4.99	66.10
Average		16.92529	85.47

Date (2024)	Jun.08		
May.24 s.c.	HPAFII parental-KHS101		
mouse	length	width	volume $(mm)^3$
#7	5.44	4.5	57.68
#13	5.17	4.8	62.37
#15	5.42	4.99	70.66
#16	6.07	3.88	47.85
#18	4.92	4.44	50.78
#25	5.21	4.2	48.12
#36	5.24	4.71	60.87
#39	5.17	4.65	58.53
Average		7.369307	57.11
	p-value	∞ Vehicle	0.000596

Date (2024)	Jun.08		
May.24 s.c.	HPAFII parental-MYLS22		
mouse	length	width	volume $(mm)^3$
#2	5.31	4.21	49.28
#20	4.28	3.88	33.74
#21	5.02	4.58	55.14
#29	5.51	4.87	68.42
#33	4.52	3.33	26.24
#34	4.81	4.54	51.91
#35	5.5	4.49	58.06
#37	4.43	4.31	43.09
Average		12.6815853	48.23
p-value		∞ Vehicle	0.000124
		∞ KHS101	0.132

Date (2024)	Jun.08		
May.24 s.c.	HPAFII parental-KHS101+MYLS22		
mouse	length	width	volume $(mm)^3$
#8	4.76	4.75	56.23
#11	4.16	3.63	28.70
#12	4.56	4.13	40.73
#24	4.47	4.09	39.15
#26	4.96	4.08	43.23
#31	4.7	3.11	23.80
#38	5.96	3.47	37.58
#40	4.98	3.7	35.70
Average		9.0962747	38.14
p-value		∞ Vehicle	0.0000042
		∞ KHS101	0.000752
		∞ MYLS22	0.109

Date (2024)	Jun.10		
May.24 s.c.	HPAFII parental-control		
mouse	length	width	volume $(mm)^3$
#1	6.26	5.36	94.17
#3	4.86	4.8	58.63
#4	6.29	5.47	98.54
#5	7.25	4.92	91.89
#6	6.28	5.2	88.91
#10	6.55	3.87	51.36
#19	6.55	4.73	76.73
#23	6.43	5.85	115.22
#28	5.7	5.02	75.21
#32	6.62	5.43	102.20
Average		18.78672	85.29

Date (2024)	Jun.10		
May.24 s.c.	HPAFII parental-KHS101		
mouse	length	width	volume $(mm)^3$
#7	6.27	5.12	86.06
#13	5.34	4.5	56.62
#15	6.95	5.5	110.08
#16	6.73	4.46	70.09
#18	5.4	4.87	67.06
#25	6	4.29	57.82
#36	5.29	4.03	44.98
#39	5.51	4.72	64.27
Average		18.90069	69.62
	p-value	∞ Vehicle	0.119979

Date (2024)	Jun.10		
May.24 s.c.	HPAFII parental-MYLS22		
mouse	length	width	volume $(mm)^3$
#2	5.74	4.24	54.03
#20	5.33	4.31	51.84
#21	5.51	5.18	77.41
#29	5.77	4.51	61.45
#33	5.24	3.95	42.81
#34	5.3	4.29	51.07
#35	5.64	4.34	55.62
#37	5.32	4.68	61.01
Average		9.52853993	56.91
p-value		∞ Vehicle	0.001519
		∞ KHS101	0.134

Date (2024)	Jun.10		
May.24 s.c.	HPAFII parental-KHS101+MYLS22		
mouse	length	width	volume $(mm)^3$
#8	6.03	4.53	64.79
#11	6.02	4.29	58.01
#12	5.13	4.38	51.53
#24	5.03	4.8	60.68
#26	5.57	4.39	56.21
#31	5.67	4.09	49.66
#38	6.77	4.22	63.13
#40	5.05	4.49	53.31
Average		5.13086	57.16
p-value		∞ Vehicle	0.0013652
		∞ KHS101	0.114500
		∞ MYLS22	0.951

Figure 8a (middle panel)

Date (2024)	Jun.12		
May.24 s.c.	HPAFII parental-control		
mouse	length	width	volume $(mm)^3$
#1	6.14	5.03	81.34
#3	5.55	4.3	53.73
#4	6.33	5.78	110.73
#5	6.78	5.54	108.96
#6	6.32	5.73	108.65
#10	6.19	5.22	88.31
#19	6.88	5.75	119.10
#23	6.22	5.46	97.09
#28	6.22	5.02	82.07
#32	6.48	5.84	115.72
Average		19.28683	96.57

Date (2024)	Jun.12		
May.24 s.c.	HPAFII parental-KHS101		
mouse	length	width	volume $(mm)^3$
#7	6.59	5.62	108.98
#13	5.15	4.67	58.81
#15	6.51	5.39	99.03
#16	6.53	4.34	64.40
#18	5.26	4.65	59.55
#25	4.98	4.36	49.57
#36	5.58	4.51	59.43
#39	6.16	4.89	77.13
Average		19.9135	72.11
	p-value	∞ Vehicle	0.026128

Date (2024)	Jun.12		
May.24 s.c.	HPAFII parental-MYLS22		
mouse	length	width	volume $(mm)^3$
#2	5.83	4.36	58.03
#20	5.11	4.72	59.61
#21	7.53	5.04	100.15
#29	6.13	5.24	88.13
#33	6.19	4.03	52.64
#34	5.63	4.37	56.29
#35	5.88	5.59	96.21
#37	4.82	4.58	52.94
Average		19.2163276	70.50
p-value		∞ Vehicle	0.016814
		∞ KHS101	0.880

Date (2024)	Jun.12		
May.24 s.c.	HPAFII parental-KHS101+MYLS22		
mouse	length	width	volume $(mm)^3$
#8	6.11	4.9	76.81
#11	5.67	4.81	68.69
#12	6.43	4.99	83.83
#24	5.7	5.24	81.95
#26	5.71	4.8	68.88
#31	5.63	4.04	48.11
#38	7.09	4.42	72.53
#40	5.68	5.6	93.27
Average		12.575087	74.26
p-value		∞ Vehicle	0.0133591
		∞ KHS101	0.812900
		∞ MYLS22	0.672

Figure 8 A (Right panel)

Vehicle		KHS101		MYLS22	
1	0.071	7	0.06	2	0.054
3	0.054	13	0.019	20	0.031
4	0.05	15	0.085	21	0.05
5	0.055	16	0.066	29	0.035
6	0.069	18	0.025	33	0.025
10	0.044	25	0.027	34	0.029
19	0.055	36	0.0195	35	0.074
23	0.049	39	0.037	37	0.043
28	0.042	Average	0.042313	Average	0.042625
32	0.072	T.Test	0.133284	T.Test	0.052328
Average	0.0561				

Combo	
8	0.034
11	0.05
12	0.043
24	0.036
26	0.025
31	0.039
38	0.042
40	0.049
Average	0.03975
	0.002968
	0.785861
	0.662579

Vehicle	KHS101	MYLS22	Combo
71	60	54	34
54	19	31	50
50	85	50	43
55	66	35	36
69	25	25	25
44	27	29	39
55	19.5	74	42
49	37	43	49
42			
72			

Figure 8b

mm^3=(4/3)*π*(Length/2)*(width/2)^2

Date (2025)	Feb.11		
Jan.30 engrafted	TM00312-Vehicle		
mouse	length	width	volume (mm^3)
#2	6.29	4.17	57.27
#15	6.05	4.44	62.45
#18			76.29
#24			61.14
#25	5.48	4.89	68.61
#28	8.38	3.4	50.72
#30	5.83	4.32	56.97
#31	6.07	4.09	53.17
#35	5.72	4.82	69.58
Average			61.80
			7.88
#18	5.76	4.42	58.92
	3.22	3.21	17.37
#24	5.28	3.96	43.35
	3.38	3.17	17.78

mm^3=(4/3)*π*(Length/2)*(width/2)^2

Date (2025)	Feb.11		
Jan.30 engrafted	TM00312-KHS101(1mg/kg)		
mouse	length	width	volume (mm^3)
#6	5.53	4.93	70.37
#7	7.83	3.3	44.65
#8	5.12	4.97	66.22
#13	5.69	4.36	56.63
#22	6.74	4.23	63.14
#26	6.39	4.15	57.62
#27	6.17	5.08	83.37
#29	7.01	3.84	54.12
#36	6.19	4.25	58.54
Average			61.63
		STD	10.37

mm^3=(4/3)*π*(Length/2)*(width/2)^2

Date (2025)	Feb.11		
Jan.30 engrafted	TM00312-MYLS22(mg/kg)		
mouse	length	width	volume (mm^3)
#4	6.01	3.76	44.49
#9	6.19	4.7	71.60
#10	8.35	3.81	63.47
#12	6.8	4.36	67.68
#14	7.72	4.36	76.84
#19	5.32	4.55	57.67
#23	6.95	3.9	55.35
#33	6.95	3.86	54.22
#40	5.85	4.46	60.93
Average			61.38
		STD	9.28

mm^3=(4/3)*π*(Length/2)*(width/2)^2

Date (2025)	Feb.11		
Jan.30 engrafted	TM00312-KSH101+ MYLS22		
mouse	length	width	volume (mm^3)
#3	6.56	4.71	76.20
#11	5.56	3.79	41.82
#16	6.81	3.91	54.51
#17	7.67	3.8	57.99
#20	6.35	4.74	74.70
#34	5.32	4.96	68.53
#37			65.11
#38	5.8	4.37	57.99
#39	6.07	4.14	54.47
Average			61.26
		STD	10.34
#37	5.75	4.09	50.36
	3.28	2.93	14.74

Vehicle		(g)	KHS101		(g)
#18	76.29	30.2	#27	83.37	29.97
#35	69.58	27.85	#6	70.37	31.72
#25	68.61	29.97	#8	66.22	30.2
#15	62.45	31.21	#22	63.14	29.94
#24	61.14	29.52	#36	58.54	26.07
#2	57.27	33.44	#26	57.62	29.29
#30	56.97	28.65	#13	56.63	31.17
#31	53.17	29.56	#29	54.12	26.27
#28	50.72	28.52	#7	44.65	30.4
Average	61.80	29.88		61.63	29.45

Vehicle	
#35	#24
#1	#25
#5	#28
#21	#30
#32	#31

KHS101	
#6	#26
#7	#27
#8	#29
#13	#36
#22	#2

Unqualified tumor			
#1	0	0	0.00
#5			103.78
#21	0	0	0.00
#32	4.87	2.91	18.05

5.76	4.78	68.91

Date (2025)	Feb.12		
Jan.30 engrafted	TM00312-Vehicle		
mouse	length	width	volume (mm^3)
#2	7.07	6.03	134.60
#15	7.27	5.27	105.72
#18			137.28
#24	7.44	4.56	81.00
#25	5.32	4.83	64.98
#28	9.37	6.02	177.80
#30	8.54	5.47	133.79
#31	6.98	4.51	74.34
#35	6.27	5.46	97.87
Average			111.93
		STD	34.61
#18	6.93	4.82	84.30
	6.42	3.97	52.98

Date (2025)	Feb.12		
Jan.30 engrafted	TM00312-KHS101(1mg/kg)		
mouse	length	width	volume (mm^3)
#6	5.19	3.4	31.41
#7	7.37	2.52	24.51
#8			111.88
#13	6.17	3.45	38.45
#22	6.56	4.97	84.84
#26	6.14	4.53	65.97
#27	5.78	4.63	64.88
#29	6.6	5.11	90.24
#36	6.14	4.56	66.85
Average	p-value	0.00757	64.34
		STD	27.29
#8	6.27	5.4	95.73
	3.85	2.83	16.14

Date (2025)	Feb.12		
Jan.30 engrafted	TM00312-MYLS22(mg/kg)		
mouse	length	width	volume (mm^3)
#4	6.66	4.05	57.20
#9			74.24
#10	9.7	3.55	64.01
#12	7.58	4.26	72.03
#14	8.84	3.54	58.00
#19	5.53	4.72	64.51
#23	8.71	4.1	76.66
#33	6.55	3.95	53.51
#40	7.74	4.09	67.79
Average	p-value	0.00186	65.33
		STD	7.61
#9	5.37	2.93	24.14
	5.45	4.19	50.10

Date (2025)	Feb.12		
Jan.30 engrafted	TM00312-KSH101+ MYLS22		
mouse	length	width	volume (mm^3)
#3	6.05	5.73	104.01
#11			49.91
#16	7.19	4.21	66.73
#17			95.14
#20			90.24
#34	5.65	3.81	42.94
#37			88.94
#38	4.65	4.55	50.41
#39	7.22	4.48	75.87
Average	p-value	0.01705	73.80
		STD	21.06
#11	4.58	3.63	31.60
	3.64	3.1	18.32
#17	6.28	4.81	76.08
	3.49	3.23	19.06
#20	4.91	4.89	61.47
	4.31	3.57	28.76
#37	5.51	4.91	69.55
	3.28	3.36	19.39

61.79963	61.63084	61.35978	61.25827			
111.9319	64.3362	65.32711	73.79867			
150.2088	95.59552	102.4752	88.65447			
229.6147	136.2504	162.8183	127.5215			
255.6672	163.5779	210.5984	129.6534			
300.6587	191.1157	219.8265	159.5164			
7.880843	10.36985	9.275934	10.34091			
34.61424	27.28653	7.605536	21.05972			
47.19061	16.68687	23.8839	11.01475			
60.25843	28.81547	60.68706	30.39494			
55.72283	39.99598	46.25503	55.15617			
64.36139	53.55601	50.1678	46.44773			

Date (2025)	Feb.14		
Jan.30 engrafted	TM00312-Vehicle		
mouse	length	width	volume (mm^3)
#2			167.34
#15	8.8	5.4	134.36
#18	10.13	5.63	168.12
#24	7.27	5.16	101.35
#25	5.89	5.54	94.65
#28	10.94	6.53	244.25
#30	9.5	6.36	201.20
#31	7.33	5.23	104.98
#35	8	5.69	135.62
Average			150.21
			47.19
#2	6.18	5.47	96.82
	5.87	4.79	70.52

Date (2025)	Feb.14		
Jan.30 engrafted	TM00312-KHS101(1mg/kg)		
mouse	length	width	volume (mm^3)
#6	5.89	5.25	86.45
#7	8.51	4.03	72.37
#8			131.19
#13	7.02	5.1	95.60
#22	6.83	5.18	95.96
#26	7.01	5.02	92.50
#27	6.41	5.4	97.87
#29	7.42	4.45	76.93
#36	7.44	5.35	111.50
Average	p-value	0.00708	95.60
		STD	16.69
#8	6.66	4.98	86.48
	4.43	4.39	44.70

Date (2025)	Feb.14		
Jan.30 engrafted	TM00312-MYLS22(mg/kg)		
mouse	length	width	volume (mm^3)
#4	7.43	5.95	137.73
#9	7.24	4.91	91.39
#10	8.85	4.46	92.17
#12	8.7	4.95	111.62
#14	7.42	4.73	86.92
#19			90.78
#23	8.74	5.72	149.73
#33			85.56
#40	6.66	4.68	76.38
Average	p-value	0.02129	102.48
		STD	23.88
#19	5.69	5.09	77.19
	3.36	2.78	13.60
#33	5.7	4.44	58.84
	3.96	3.59	26.72

Date (2025)	Feb.14		
Jan.30 engrafted	TM00312-KSH101+ MYLS22		
mouse	length	width	volume (mm^3)
#3	7.45	4.1	65.57
#11			98.81
#16	7.88	4.94	100.69
#17			102.76
#20			89.91
#34	6.04	5.25	87.17
#37			90.17
#38	5.61	5.29	82.20
#39	7.09	4.66	80.62
Average	p-value	0.00244	88.65
		STD	11.01
#11	5.42	4.38	54.44
	5.14	4.06	44.36
#17	5.34	3.67	37.66
	5.75	4.65	65.10
#20	5.25	4.8	63.33
	4.24	3.46	26.58
#37	6.17	4.43	63.40
	4.08	3.54	26.77
		STD	21.98

Date (2025)	Feb.17		
Jan.30 engrafted	TM00312-Vehicle		
mouse	length	width	volume (mm^3)
#2	9.42	7.68	290.92
#15	11.01	6.61	251.88
#18	12.43	6.14	245.36
#24			175.17
#25	6.45	5.85	115.58
#28	11.72	6.64	270.56
#30	10.21	6.51	226.56
#31	8.34	6.32	174.42
#35	11.71	7.18	316.09
Average			229.61
			60.26
#24	7.19	5.27	104.56
	5.46	4.97	70.62

Date (2025)	Feb.17		
Jan.30 engrafted	TM00312-KHS101(1mg/kg)		
mouse	length	width	volume (mm^3)
#6	6.88	6.84	168.54
#7	12.58	4.48	132.20
#8	7.27	4.99	94.78
#13	7.03	5.21	99.91
#22			138.55
#26	7.59	5.54	121.97
#27	8.23	5.39	125.19
#29	8.63	6.43	186.82
#36	8.51	5.96	158.28
Average	p-value	0.00114	136.25
		STD	28.82
#22	8.18	4.95	104.95
	4.98	3.59	33.61

Date (2025)	Feb.17		
Jan.30 engrafted	TM00312-MYLS22(mg/kg)		
mouse	length	width	volume (mm^3)
#4	7.19	4.37	71.89
#9			163.60
#10	9.51	4.99	123.99
#12	9.7	5.84	173.22
#14	10.31	5.68	174.16
#19			105.94
#23	12.14	6.9	302.63
#33	9.53	6.01	180.24
#40	8.35	6.23	169.69
Average	p-value	0.04209	162.82
		STD	60.69
#19	5.87	5.51	93.31
	3.99	2.84	12.63
#9	7.39	4.86	91.39
	5.22	5.14	72.21

Date (2025)	Feb.17		
Jan.30 engrafted	TM00312-KSH101+ MYLS22		
mouse	length	width	volume (mm^3)
#3	7.89	5.71	134.69
#11			130.07
#16			146.32
#17	11.46	4.97	148.22
#20			119.77
#34	6.64	5.31	98.03
#37			132.72
#38	6.11	4.42	62.50
#39	8.77	6.18	175.38
Average	p-value	0.00058	127.52
		STD	30.39
#11	6.53	4.69	75.21
#16	4.93	4.61	54.86
	9.25	4.98	120.12
	4.71	3.26	26.21
#20	5.8	5.54	93.21
	3.98	3.57	26.56
#37	5.98	5.37	90.29
	4.66	4.17	42.43

Date (2025)	Feb.19		
Jan.30 engrafted	TM00312-Vehicle		
mouse	length	width	volume (mm^3)
#2			197.35
#15	12.42	7.44	359.97
#18	11.99	6.75	286.04
#24	12.73	6.44	276.44
#25	7.48	6.19	150.07
#28	11.15	6.28	230.25
#30	10.19	7.11	269.72
#31	8.58	7.8	273.32
#35	9.66	7.14	257.85
Average			255.67
			55.72
#2	7.16	5.75	123.95
	6.11	4.79	73.40

Date (2025)	Feb.19		
Jan.30 engrafted	TM00312-KHS101(1mg/kg)		
mouse	length	width	volume (mm^3)
#6	6.72	6.72	158.89
#7	15.27	5.4	233.14
#8	9.85	5.29	144.33
#13	7.81	4.46	81.34
#22			164.84
#26	9.49	5.41	145.43
#27	8.61	6.48	189.30
#29	8.72	6.62	200.09
#36	8.79	5.8	154.83
Average	p-value	0.00158	163.58
		STD	40.00
#22	7.57	5.54	121.65
	4.98	4.07	43.19

Date (2025)	Feb.19		
Jan.30 engrafted	TM00312-MYLS22(mg/kg)		
mouse	length	width	volume (mm^3)
#4			192.29
#9			191.71
#10	10.62	4.89	132.97
#12	9.31	6.39	199.04
#14	11.93	6	224.88
#19			161.55
#23	12.62	6.63	290.46
#33	10.37	6.7	243.74
#40	10.44	6.88	258.75
Average	p-value	0.09747	210.60
		STD	46.26
#19	8.46	5.55	136.44
	3.96	3.48	25.11
#9	7.64	5.58	124.55
	6.39	4.48	67.15
#4	8.08	5.32	119.74
	5.61	4.97	72.56

Date (2025)	Feb.19		
Jan.30 engrafted	TM00312-KSH101+ MYLS22		
mouse	length	width	volume (mm^3)
#3	8.27	5.78	144.66
#11			96.85
#16			151.99
#17	10.44	5.51	165.96
#20			81.75
#34	7.42	5.17	103.84
#37	7.73	4.62	86.39
#38	6.06	4.92	76.81
#39	9.91	7.06	258.63
Average	p-value	0.00033	129.65
MYLS22	0.005811	STD	55.16
#11	7.04	3.94	57.22
	4.95	3.91	39.62
#16	8.55	4.84	104.87
	4.89	4.29	47.12
#20	4.76	4.67	54.35
	3.74	3.74	27.39

Date (2025)	Feb.20		
Jan.30 engrafted	TM00312-Vehicle		
mouse	length	width	volume (mm^3)
#2			306.67
#15	12.9	7.52	381.97
#18	12.63	6.9	314.85
#24	11.56	6.2	232.67
#25	8.02	6.06	154.21
#28	12.7	7.34	358.26
#30	10.79	7.52	319.49
#31	10.21	7.68	315.32
#35	10.95	7.5	322.50
Average			300.66
			64.36
#2	8.29	6.68	193.69
	6.98	5.56	112.98

Date (2025)	Feb.20		
Jan.30 engrafted	TM00312-KHS101(1mg/kg)		
mouse	length	width	volume (mm^3)
#6	8.67	4.56	94.39
#7	15.4	5.86	276.89
#8			166.71
#13	7.91	5.49	124.83
#22			202.12
#26	9.74	6.58	220.81
#27	8.4	6.48	184.68
#29	9.09	6.56	204.82
#36	10.17	6.78	244.78
Average	p-value	0.00194	191.12
		STD	53.56
#22	7.76	6.13	152.68
	5.06	4.32	49.44
#8	7.81	5.37	117.92
	5.57	4.09	48.79

Date (2025)	Feb.20		
Jan.30 engrafted	TM00312-MYLS22(mg/kg)		
mouse	length	width	volume (mm^3)
#4			199.23
#9			288.27
#10	10.76	5.53	172.29
#12	11.9	6.54	266.50
#14	11.45	5.3	168.41
#19			152.42
#23	12.18	6.09	236.53
#33	11.47	5.8	202.03
#40	11.25	7.05	292.77
Average	p-value	0.01280	219.83
		STD	50.17
#19	7.25	5.9	132.14
	3.41	3.37	20.28
#9	9.27	6.73	219.84
	6.07	4.64	68.43
#4	8.15	5.03	107.97
	5.72	5.52	91.26

Date (2025)	Feb.20		
Jan.30 engrafted	TM00312-KSH101+ MYLS22		
mouse	length	width	volume (mm^3)
#3	8.53	6.45	185.81
#11			141.07
#16			195.09
#17	9.41	6.5	208.17
#20	8.32	5.18	116.89
#34	7.2	5.41	110.34
#37	9.58	5.77	167.00
#38	6.45	4.97	83.42
#39	9.9	6.63	227.86
Average	p-value	0.00012	159.52
	MYLS22	0.023911	46.45
#11	6.45	5.05	86.13
	5.47	4.38	54.95
#16	8.34	5.42	128.28
	5.25	4.93	66.81

Bled mice					
TM00312-Vehicle		TM00312-KHS101		TM00312-MYLS22		TM00312-KSH101+ MYLS22	
#15	381.97	#7	276.89	#40	292.77	#39	227.86
#28	358.26	#36	244.78	#9	288.27	#17	208.17
#35	322.50	#26	220.81	#12	266.50	#16	195.09
#30	319.49	#29	204.82	#23	236.53	#3	185.81
#31	315.32	#22	202.12	#33	202.03	#37	167.00
#18	314.85	#27	184.68	#4	199.23	#11	141.07
#2	306.67	#8	166.71	#10	172.29	#20	116.89
#24	232.67	#13	124.83	#14	168.41	#34	110.34
#25	154.21	#6	94.39	#19	152.42	#38	83.42

Ex-vivo tumor weight (g)							
TM00312-Vehicle		TM00312-KHS101		TM00312-MYLS22		TM00312-KSH101+ MYLS22	
#2	0.3001	#6	0.0756	#4	0.1895	#3	0.1988
#15	0.2065	#7	0.2592	#9	0.2138	#11	0.1088
#18	0.2744	#8	0.1021	#10	0.1558	#16	0.1339
#24	0.1555	#13	0.0828	#12	0.2388	#17	0.261
#25	0.0667	#22	0.156	#14	0.1826	#20	0.1289
#28	0.2931	#26	0.1381	#19	0.1013	#34	0.0808
#30	0.2021	#27	0.188	#23	0.2571	#37	0.1355
#31	0.2072	#29	0.262	#33	0.2298	#38	0.0655
#35	0.1841	#36	0.2151	#40	0.1922	#39	0.1629
Average	0.2100	Average	0.1643	Average	0.1957	Average	0.1418
						t-Test (p)=VEH	0.0235 tail=1
			0.1004		0.3152	t-Test (p)=MYLS	0.0252 tail=1

		(g)	Combo		(g)
	76.84	33.67	#3	76.20	29.71
	71.60	29.33	#20	74.70	33.55
	67.68	28.87	#34	68.53	27.69
	63.47	30.58	#37	65.11	27.65
	60.93	26.25	#38	57.99	26.39
	57.67	27.55	#17	57.99	32.27
	55.35	30.54	#16	54.51	32.43
	54.22	31.27	#39	54.47	26.27
	44.49	30.54	#11	41.82	32.85
	61.36	29.84		61.26	29.87

MYLS22	
#4	#19
#9	#23
#10	#33
#12	#40
#14	#15

Combo	
#3	#20
#11	#34
#16	#37
#17	#38
#18	#39

4.29	3.94	34.87