

Sample	Sum Sq	Df	F value	Pr(>F)	Covariate	Technology
Human_DLPFC_1	34500.72	1	100.68	1.98E-23	NCell	Visium
Human_DLPFC_1	117179397.43	7	48851.87	0.00E+00	Region	Visium
Human_DLPFC_1	8845.69	6	4.30	2.48E-04	NCell:Region	Visium
Human_DLPFC_2	2081.24	1	6.84	8.96E-03	NCell	Visium
Human_DLPFC_2	92069861.97	7	43211.83	0.00E+00	Region	Visium
Human_DLPFC_2	26463.78	6	14.49	1.93E-16	NCell:Region	Visium
Human_DLPFC_3	7.34	1	0.02	8.80E-01	NCell	Visium
Human_DLPFC_3	126789651.36	7	55808.31	0.00E+00	Region	Visium
Human_DLPFC_3	40029.82	6	20.56	6.75E-24	NCell:Region	Visium
Human_DLPFC_4	32441.75	1	99.77	2.96E-23	NCell	Visium
Human_DLPFC_4	80591619.22	7	35406.66	0.00E+00	Region	Visium
Human_DLPFC_4	5147.76	6	2.64	1.48E-02	NCell:Region	Visium
Human_DLPFC_5	81563.47	1	153.18	1.72E-34	NCell	Visium
Human_DLPFC_5	101041666.77	5	37952.89	0.00E+00	Region	Visium
Human_DLPFC_5	16164.36	4	7.59	4.37E-06	NCell:Region	Visium
Human_DLPFC_6	37491.09	1	68.34	1.93E-16	NCell	Visium
Human_DLPFC_6	88332967.90	5	32204.90	0.00E+00	Region	Visium
Human_DLPFC_6	84281.18	4	38.41	1.69E-31	NCell:Region	Visium
Human_DLPFC_7	85864.99	1	165.99	2.94E-37	NCell	Visium
Human_DLPFC_7	141814970.75	5	54828.36	0.00E+00	Region	Visium
Human_DLPFC_7	27262.40	4	13.18	1.15E-10	NCell:Region	Visium
Human_DLPFC_8	102953.38	1	206.08	1.42E-45	NCell	Visium
Human_DLPFC_8	143497872.41	5	57447.41	0.00E+00	Region	Visium
Human_DLPFC_8	23528.19	4	11.77	1.66E-09	NCell:Region	Visium
Human_DLPFC_9	168425.63	1	219.50	2.99E-48	NCell	Visium
Human_DLPFC_9	168867149.07	7	31439.23	0.00E+00	Region	Visium
Human_DLPFC_9	40291.15	6	8.75	1.73E-09	NCell:Region	Visium
Human_DLPFC_10	70677.51	1	81.42	2.89E-19	NCell	Visium
Human_DLPFC_10	231980298.06	7	38179.13	0.00E+00	Region	Visium
Human_DLPFC_10	87771.97	6	16.85	2.78E-19	NCell:Region	Visium
Human_DLPFC_11	87182.45	1	134.54	1.47E-30	NCell	Visium
Human_DLPFC_11	147515245.06	7	32520.23	0.00E+00	Region	Visium
Human_DLPFC_11	80903.20	6	20.81	4.26E-24	NCell:Region	Visium
Human_DLPFC_12	68630.43	1	108.44	5.07E-25	NCell	Visium
Human_DLPFC_12	143893562.86	7	32481.28	0.00E+00	Region	Visium
Human_DLPFC_12	126632.31	6	33.35	2.72E-39	NCell:Region	Visium
mBrain_ff_rep1	3444356.83	1	15426.05	0.00E+00	NCell	Xenium
mBrain_ff_rep1	326521854.93	140	10445.54	0.00E+00	Region	Xenium
mBrain_ff_rep1	1115507.01	138	36.20	0.00E+00	NCell:Region	Xenium
mBrain_ff_rep2	3614557.83	1	16128.12	0.00E+00	NCell	Xenium
mBrain_ff_rep2	298501277.88	144	9249.38	0.00E+00	Region	Xenium
mBrain_ff_rep2	1194535.82	142	37.54	0.00E+00	NCell:Region	Xenium
mBrain_ff_rep3	1745971.08	1	6086.50	0.00E+00	NCell	Xenium
mBrain_ff_rep3	317970313.77	144	7697.59	0.00E+00	Region	Xenium
mBrain_ff_rep3	1051776.12	143	25.64	0.00E+00	NCell:Region	Xenium
STOmics Brain	216848735.03	118	30115.63	0.00E+00	Region	STOmics
STOmics Brain	13635312.04	1	223450.90	0.00E+00	NSpots	STOmics

STOmics Brain	178506.05	110	26.59	0.00E+00	Region:NSpots	STOmics
Lung12	687277.09	1	882.19	5.43E-187	NCell	CosMx
Lung12	9758201.44	3	4175.23	0.00E+00	Region	CosMx
Lung12	63117.98	1	81.02	2.58E-19	FOV	CosMx
Lung12	9716.04	2	6.24	1.96E-03	NCell:Region	CosMx
Lung12	69814.50	1	89.61	3.44E-21	NCell:FOV	CosMx
Lung12	18098.54	2	11.62	9.13E-06	Region:FOV	CosMx
Lung12	16647.14	2	10.68	2.31E-05	NCell:Region:FOV	CosMx
Lung13	264911.33	1	432.71	2.24E-94	NCell	CosMx
Lung13	11441740.90	2	9344.65	0.00E+00	Region	CosMx
Lung13	5159.17	1	8.43	3.70E-03	FOV	CosMx
Lung13	5877.71	1	9.60	1.95E-03	NCell:Region	CosMx
Lung13	4650.18	1	7.60	5.86E-03	NCell:FOV	CosMx
Lung13	7313.07	1	11.95	5.50E-04	Region:FOV	CosMx
Lung13	8613.87	1	14.07	1.77E-04	NCell:Region:FOV	CosMx
Lung5_Rep1	3119801.60	1	3213.47	0.00E+00	NCell	CosMx
Lung5_Rep1	14001933.76	4	3605.58	0.00E+00	Region	CosMx
Lung5_Rep1	175100.57	1	180.36	8.15E-41	FOV	CosMx
Lung5_Rep1	22817.10	3	7.83	3.21E-05	NCell:Region	CosMx
Lung5_Rep1	1341.21	1	1.38	2.40E-01	NCell:FOV	CosMx
Lung5_Rep1	49412.00	3	16.97	5.43E-11	Region:FOV	CosMx
Lung5_Rep1	22767.49	3	7.82	3.29E-05	NCell:Region:FOV	CosMx
Lung5_Rep2	2077114.54	1	2503.86	0.00E+00	NCell	CosMx
Lung5_Rep2	15581345.40	4	4695.64	0.00E+00	Region	CosMx
Lung5_Rep2	186983.53	1	225.40	1.82E-50	FOV	CosMx
Lung5_Rep2	19512.41	3	7.84	3.18E-05	NCell:Region	CosMx
Lung5_Rep2	835.68	1	1.01	3.16E-01	NCell:FOV	CosMx
Lung5_Rep2	76796.45	3	30.86	7.36E-20	Region:FOV	CosMx
Lung5_Rep2	40856.41	3	16.42	1.21E-10	NCell:Region:FOV	CosMx
Lung5_Rep3	2056427.37	1	2494.96	0.00E+00	NCell	CosMx
Lung5_Rep3	9808764.80	4	2975.12	0.00E+00	Region	CosMx
Lung5_Rep3	105280.25	1	127.73	1.82E-29	FOV	CosMx
Lung5_Rep3	11572.50	3	4.68	2.86E-03	NCell:Region	CosMx
Lung5_Rep3	10.53	1	0.01	9.10E-01	NCell:FOV	CosMx
Lung5_Rep3	3612.38	3	1.46	2.23E-01	Region:FOV	CosMx
Lung5_Rep3	18273.46	3	7.39	6.07E-05	NCell:Region:FOV	CosMx
Lung6	467167.78	1	493.19	4.55E-107	NCell	CosMx
Lung6	16171836.10	4	4268.12	0.00E+00	Region	CosMx
Lung6	65955.69	1	69.63	7.96E-17	FOV	CosMx
Lung6	60454.74	3	21.27	9.74E-14	NCell:Region	CosMx
Lung6	35055.08	1	37.01	1.21E-09	NCell:FOV	CosMx
Lung6	69811.80	3	24.57	7.70E-16	Region:FOV	CosMx
Lung6	9264.03	3	3.26	2.06E-02	NCell:Region:FOV	CosMx
Lung9_Rep1	430233.14	1	555.44	5.06E-120	NCell	CosMx
Lung9_Rep1	9918301.48	4	3201.17	0.00E+00	Region	CosMx
Lung9_Rep1	316468.66	1	408.57	2.50E-89	FOV	CosMx
Lung9_Rep1	15867.87	3	6.83	1.36E-04	NCell:Region	CosMx
Lung9_Rep1	66677.40	1	86.08	2.03E-20	NCell:FOV	CosMx

Lung9_Rep1	36195.56	3	15.58	4.15E-10	Region:FOV	CosMx
Lung9_Rep1	721.96	3	0.31	8.18E-01	NCell:Region:FOV	CosMx
IDC	4870848.67	1	13529.67	0.00E+00	NCell	Xenium
IDC	363445710.13	8	126192.08	0.00E+00	Region	Xenium
IDC	244662.37	7	97.08	6.75E-141	NCell:Region	Xenium
ILC	2134088.04	1	5631.67	0.00E+00	NCell	Xenium
ILC	147858286.51	6	65030.88	0.00E+00	Region	Xenium
ILC	1073683.05	5	566.67	0.00E+00	NCell:Region	Xenium