

Supplementary Information

Title:

Anti-HIV microRNA expression in a novel Indian cohort

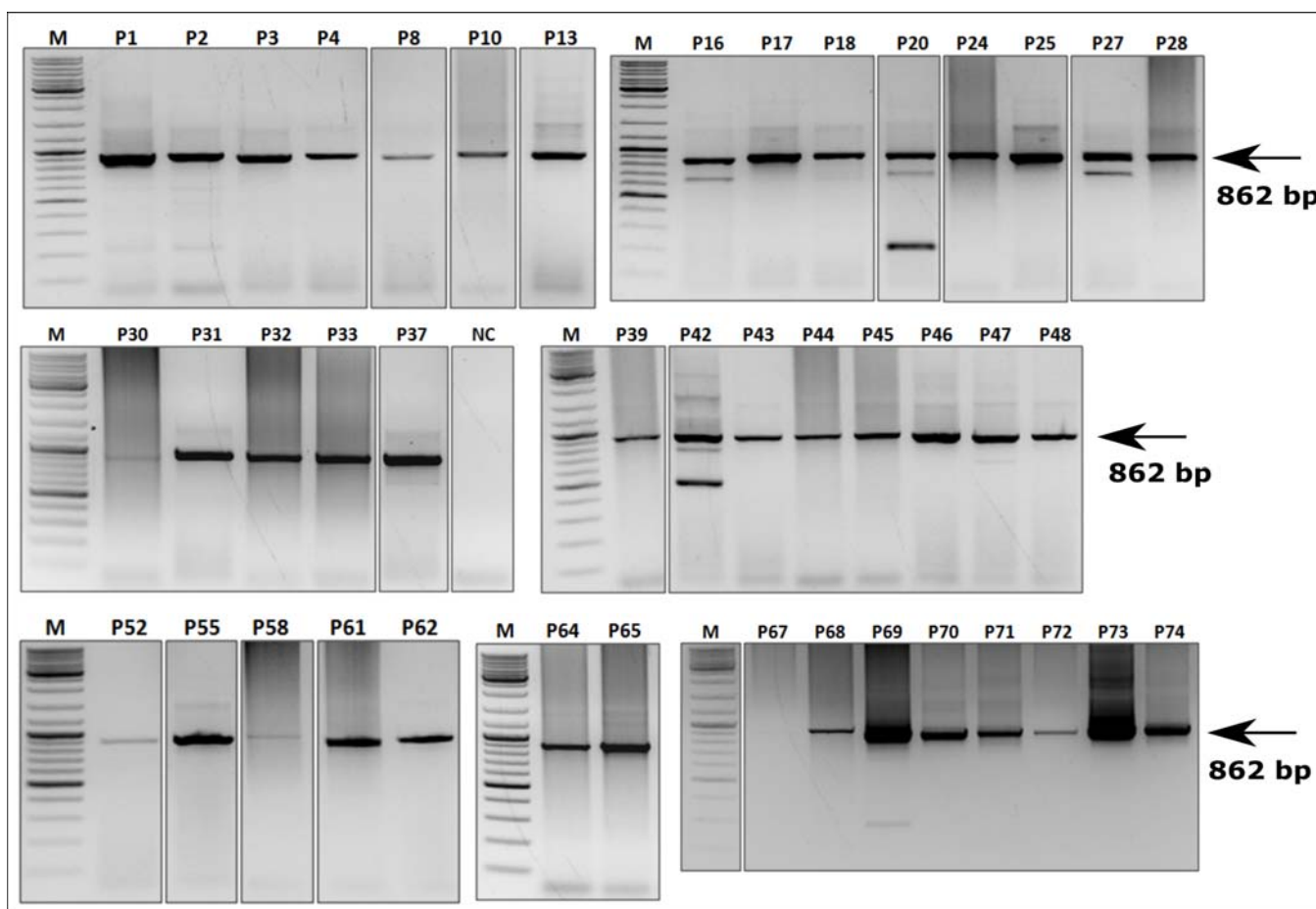
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Supplementary figure 1 legend:

Characterization of HIV-1 nef mutation status in the patient cohort; patient numbers are indicated above the respective lanes; NC=no-template PCR control; M=marker. Genomic DNA was isolated from the PBMCs of 43 patients and subjected to nested PCR using primers flanking the nef region such that the wild type nef would produce a 862bp product.

Supplementary table 1: Regression Analysis - miR-382-5p

□

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.415201
R Square	0.172392
Adjusted R Square	0.058239
Standard Error	1.847633
Observations	67

ANOVA					
	df	SS	MS	F	Significance F
Regression	8	41.24306	5.155383	1.510183	0.173666924
Residual	58	197.9973	3.413747		
Total	66	239.2404			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-11.6048	2.645506	-4.38663	4.92E-05	-16.90040057	-6.30929	-16.9004	-6.30929
Match	0.01998	0.010955	1.823786	0.073338	-0.001949321	0.04191	-0.00195	0.04191
Hb	0.134347	0.100699	1.334148	0.18737	-0.067223356	0.335917	-0.06722	0.335917
Platelet	0.001419	0.003628	0.391178	0.697099	-0.005843612	0.008682	-0.00584	0.008682
WBC	0.141227	0.156418	0.902881	0.370324	-0.171878157	0.454332	-0.17188	0.454332
TLC	-0.38224	0.494607	-0.77282	0.442766	-1.372306986	0.60782	-1.37231	0.60782
CD4	-0.00203	0.003018	-0.67366	0.503204	-0.008074997	0.004008	-0.00807	0.004008
CD4%	-0.00507	0.086541	-0.05857	0.953498	-0.178299799	0.168163	-0.1783	0.168163
CD8_impute	-0.00073	0.00092	-0.78994	0.432782	-0.002567915	0.001115	-0.00257	0.001115

RESIDUAL OUTPUT

Observation	Predicted miR-382-5p	Residuals
1	-10.8898	-2.79495
2	-11.0195	1.353612
3	-10.4734	-1.54073
4	-11.3843	1.833175
5	-11.0136	-1.93609
6	-10.0543	3.007823
7	-10.1791	-1.78123
8	-11.0538	-0.5546
9	-10.2766	-0.7969
10	-9.95216	-0.34641

11	-10.8139	0.827673
12	-11.5806	1.385701
13	-10.6831	-2.07604
14	-10.0293	1.106242
15	-10.0688	0.425826
16	-12.0065	-1.70033
17	-11.2383	1.652194
18	-12.4239	-0.89981
19	-9.39931	-1.27559
20	-11.7074	-1.81194
21	-10.8703	-1.55801
22	-12.4669	0.098209
23	-9.8977	0.315056
24	-11.7849	0.912146
25	-10.0946	-1.05484
26	-10.5374	1.120504
27	-10.7481	0.310168
28	-11.0255	-1.55521
29	-10.4708	-1.78854
30	-11.6476	-1.07743
31	-12.384	0.067703
32	-11.544	2.036215
33	-9.85634	-0.58182
34	-10.8949	-0.17674
35	-10.8756	-3.06361
36	-12.3089	-1.97564
37	-10.3421	2.271243
38	-10.4097	-2.63438
39	-11.0213	0.283975
40	-10.2852	2.558925
41	-9.99562	0.503955
42	-10.8031	0.679517
43	-10.344	2.025833
44	-11.9352	4.750568
45	-10.5771	2.824429
46	-9.83245	2.732471
47	-10.4033	-2.67604
48	-11.0671	-0.60242
49	-10.8408	-0.93053
50	-11.3432	-2.11277
51	-10.2365	-1.6007
52	-10.0556	1.843777
53	-10.9143	2.549254
54	-9.9965	-0.15324
55	-10.5535	-1.12555
56	-10.7356	-0.01399
57	-9.52063	0.697767

58	-9.41344	0.029097
59	-11.8046	4.333868
60	-10.4391	-1.24784
61	-10.0224	-0.02088
62	-9.28738	1.257223
63	-10.5187	1.051936
64	-10.2535	-1.48313
65	-9.98757	-0.48477
66	-10.3065	-1.15095
67	-12.5524	-0.26243

y = B17+B18*X1+B19*X2+B20*X3 etc

Supplementary table 2: Regression Analysis - miR-155-5p

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.503036
R Square	0.253045
Adjusted R Square	0.150017
Standard Error	1.062275
Observations	67

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	8	22.17204	2.771505	2.456074	0.023071
Residual	58	65.44886	1.128429		
Total	66	87.6209			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-3.42351	1.521003	-2.25083	0.028202	-6.46813	-0.37889	-6.46813	-0.37889
Match	-0.00108	0.006299	-0.17086	0.864932	-0.01368	0.011532	-0.01368	0.011532
Hb	-0.04346	0.057896	-0.75062	0.455919	-0.15935	0.072433	-0.15935	0.072433
Platelet	-0.00146	0.002086	-0.69854	0.487629	-0.00563	0.002719	-0.00563	0.002719
WBC	-0.066	0.089931	-0.73392	0.465954	-0.24602	0.114014	-0.24602	0.114014
TLC	-0.13376	0.284369	-0.47037	0.639853	-0.70298	0.435466	-0.70298	0.435466
CD4	0.003111	0.001735	1.792644	0.078245	-0.00036	0.006584	-0.00036	0.006584
CD4%	-0.14993	0.049756	-3.01325	0.003828	-0.24952	-0.05033	-0.24952	-0.05033
CD8_impute	-0.00105	0.000529	-1.99265	0.051013	-0.00211	4.8E-06	-0.00211	4.8E-06

RESIDUAL OUTPUT

<i>Observation</i>	<i>Predicted miR-155-5p</i>	<i>Residuals</i>
1	-7.63688	-0.97789
2	-7.09091	-1.1216
3	-8.68004	-1.87739
4	-7.87507	1.057317
5	-8.26503	0.322007
6	-7.38734	1.784239
7	-8.35438	-0.28931
8	-8.3636	-1.56476
9	-7.82168	1.138211
10	-7.77412	-0.31111
11	-7.63869	2.079141
12	-9.58284	-0.47534
13	-8.13041	-0.30203
14	-8.53275	-0.5736
15	-9.01342	0.007107
16	-9.04306	0.232908
17	-8.02984	0.080448
18	-8.32678	1.023093
19	-9.69003	-0.58154
20	-8.98935	0.839991
21	-7.66866	-0.49299
22	-8.61935	0.337365
23	-8.14994	-1.55271
24	-8.51903	-0.33877
25	-8.87774	0.417501
26	-9.55239	-0.61117
27	-8.34105	-0.71359
28	-8.28647	-0.37762
29	-7.85385	-0.39888
30	-8.1323	-0.41274
31	-8.16617	0.369824
32	-8.52824	-0.80452
33	-8.19083	0.935996
34	-8.18213	0.140479
35	-7.18214	-2.28706
36	-7.75617	-0.80504
37	-8.79238	0.788179
38	-7.04718	-1.32019
39	-7.88673	0.83611
40	-8.06003	1.443776
41	-7.26807	-0.45026
42	-9.04434	0.814074

43	-7.99408	-0.65408
44	-8.05027	0.612332
45	-7.46183	1.629129
46	-8.11047	1.693823
47	-8.87818	0.532198
48	-8.24383	-0.09906
49	-7.71918	-0.43545
50	-7.87204	1.532717
51	-7.966	-1.15372
52	-8.00117	0.122702
53	-8.23968	0.441262
54	-9.11567	-1.1174
55	-8.28647	-0.52587
56	-7.84297	-0.29999
57	-8.00545	1.485923
58	-7.2232	0.208862
59	-7.96716	2.269769
60	-7.65921	0.152234
61	-8.09787	-1.08203
62	-8.42882	0.268661
63	-8.37261	-1.38413
64	-8.45218	0.428933
65	-8.12305	0.817384
66	-8.426	0.13188
67	-7.24773	-1.58372

Supplementary table 3: Immune subset analysis

PID	Class7	Class4	miR-382-5p	miR-155-5p	Hb	Platelet	WBC	TLC	CD4	CD4%	CD8_impute	<i>Predicted miR-382-5p</i>	<i>Residuals</i>	CD8
2	Amb.ART	Amb	-13.68	-8.61	14.8	242	4.9	2	299	15	1239	-10.8898	-2.79495	
5	Amb.ART	Amb	-9.67	-8.21	14.8	225	7.2	3.2	327	10	1239	-11.0195	1.353612	
8	Amb.ART	Amb	-12.01	-10.56	14.7	236	8.6	1.8	417	23	1239	-10.4734	-1.54073	
9	Amb.ART	Amb	-9.55	-6.82	12.9	350	12.4	3.6	766	21	1239	-11.3843	1.833175	
34	Amb.ART	Amb	-12.95	-7.94	17.3	152	8.6	3.4	493	15	1988	-11.0136	-1.93609	1988
42	Amb.ART	Amb	-7.05	-5.60	11.4	355	5.8	1.9	195	10	1307	-10.0543	3.007823	1307
44	Amb.ART	Amb	-11.96	-8.64	10.3	388	11.9	2.5	583	23	1061	-10.1791	-1.78123	1061
3	Amb.N	Amb	-11.61	-9.93	11.5	272	6	1.6	329	21	1239	-11.0538	-0.5546	
31	Amb.N	Amb	-11.07	-6.68	13.5	256	7.1	2.1	361	17	1167	-10.2766	-0.7969	1167
45	Amb.N	Amb	-10.30	-8.09	15.4	238	7.2	2.4	281	12	1487	-9.95216	-0.34641	1487
48	Amb.N	Amb	-9.99	-5.56	9.5	190	3.3	1.6	287	18	1175	-10.8139	0.827673	1175
51	Amb.N	Amb	-10.19	-10.06	11.9	265	7.5	2.4	1164	49	628	-11.5806	1.385701	628
57	Amb.N	Amb	-12.76	-8.43	13.1	202	13.6	4.4	469	11	2000	-10.6831	-2.07604	2000
58	Amb.N	Amb	-8.92	-9.11	11.6	283	5.6	1.7	516	30	610	-10.0293	1.106242	610
64	Amb.N	Amb	-9.64	-9.01	14.7	330	11.4	2.7	909	34	968	-10.0688	0.425826	968
6	LTNP	LTNP	-13.71	-8.81	13.7	342	7	2.6	821	32	1391	-12.0065	-1.70033	
11	LTNP	LTNP	-9.59	-7.95	11.4	335	5.9	2.2	525	24	913	-11.2383	1.652194	913
12	LTNP	LTNP	-13.32	-7.30	11.7	281	6.6	2.9	822	28	1431	-12.4239	-0.89981	1431
20	LTNP	LTNP	-10.67	-10.27	15.2	397	10.2	1.5	517	34	610	-9.39931	-1.27559	610
30	LTNP	LTNP	-13.52	-8.15	12.6	233	6.4	2.4	852	36	1097	-11.7074	-1.81194	1097
36	LTNP	LTNP	-12.43	-8.16	16	178	8.7	3.4	559	16	1484	-10.8703	-1.55801	1484
38	LTNP	LTNP	-12.37	-8.28	13	284	9.3	3.5	1134	32	1732	-12.4669	0.098209	1732
62	LTNP	LTNP	-9.58	-9.70	15.2	229	6.5	2.2	448	20	1271	-9.8977	0.315056	1271
72	LTNP	LTNP	-10.87	-8.86	12.8	394	12	4.4	1124	26	2000	-11.7849	0.912146	2000
75	LTNP	LTNP	-11.15	-8.46	12.6	355	9.4	2.5	825	33	925	-10.0946	-1.05484	925
4	LTNP.NC	LTNP	-9.42	-10.16	17.9	223	4.1	1.2	345	28	1391	-10.5374	1.120504	
13	LTNP.NC	LTNP	-10.44	-9.05	12.6	291	9	2.2	550	25	955	-10.7481	0.310168	955
14	LTNP.NC	LTNP	-12.58	-8.66	16.4	318	13	3.6	830	23	1391	-11.0255	-1.55521	
23	LTNP.NC	LTNP	-12.26	-8.25	12.8	245	8.2	0	500	16	2000	-10.4708	-1.78854	2000
25	LTNP.NC	LTNP	-12.73	-8.55	11.4	143	4.8	2.2	562	26	1155	-11.6476	-1.07743	1155
37	LTNP.NC	LTNP	-12.32	-7.80	14.8	179	9.2	4.1	936	23	2000	-12.384	0.067703	2000
41	LTNP.NC	LTNP	-9.51	-9.33	12.9	349	9.1	3.4	716	21	1913	-11.544	2.036215	1913
15	Rapid	Rapid	-10.44	-7.25	10.8	424	5	0.4	65	14	1313	-9.85634	-0.58182	
16	Rapid	Rapid	-11.07	-8.04	10.5	189	4.8	1.2	225	19	1313	-10.8949	-0.17674	
17	Rapid	Rapid	-13.94	-9.47	12.6	176	4	1.9	334	17	862	-10.8756	-3.06361	862
19	Rapid	Rapid	-14.28	-8.56	11.5	256	7.2	4	475	12	2000	-12.3089	-1.97564	2000

21	Rapid	Rapid	-8.07	-8.00	11.3	350	4.8	1.3	370	29	624	-10.3421	2.271243	624
26	Rapid	Rapid	-13.04	-8.37	9.7	335	5	1.7	185	11	1001	-10.4097	-2.63438	1001
39	Rapid	Rapid	-10.74	-7.05	14.6	163	6.5	2.9	329	11	2000	-11.0213	0.283975	2000
50	Rapid	Rapid	-7.73	-6.62	13.7	267	6.7	2.3	367	16	1512	-10.2852	2.558925	1512
69	Rapid	Rapid	-9.49	-7.72	12.2	80	4.2	1.7	238	14	1198	-9.99562	0.503955	1198
1	Reg.ART	Reg	-10.12	-8.23	16	264	7.1	1.8	472	26	1329	-10.8031	0.679517	
7	Reg.ART	Reg	-8.32	-8.65	13.3	252	7.1	1.4	221	15	1329	-10.344	2.025833	
18	Reg.ART	Reg	-7.18	-7.44	11.5	134	10.2	3.2	545	16	2000	-11.9352	4.750568	2000
22	Reg.ART	Reg	-7.75	-5.83	13.7	165	6.2	2.1	339	16	1086	-10.5771	2.824429	1086
24	Reg.ART	Reg	-7.10	-6.42	13.7	167	4.5	1.1	270	25	446	-9.83245	2.732471	446
27	Reg.ART	Reg	-13.08	-8.35	10.6	248	4.9	1.2	372	31	597	-10.4033	-2.67604	597
28	Reg.ART	Reg	-11.67	-8.34	12.1	331	7.3	2.5	600	24	1171	-11.0671	-0.60242	1171
29	Reg.ART	Reg	-11.77	-8.15	11.9	211	7.3	2.4	308	13	1562	-10.8408	-0.93053	1562
32	Reg.ART	Reg	-13.46	-6.34	12.6	238	10.9	4.3	396	9	2000	-11.3432	-2.11277	2000
35	Reg.ART	Reg	-11.84	-9.12	12.5	221	4	1.4	287	21	886	-10.2365	-1.6007	886
40	Reg.ART	Reg	-8.21	-7.88	12.9	346	8.7	2.4	421	18	1126	-10.0556	1.843777	1126
47	Reg.ART	Reg	-8.37	-7.80	12.1	274	8.2	2.8	423	15	1892	-10.9143	2.549254	1892
59	Reg.ART	Reg	-10.15	-10.23	15	223	5.2	1.7	545	32	931	-9.9965	-0.15324	931
70	Reg.ART	Reg	-11.68	-8.81	14	237	7.8	3	488	16	1935	-10.5535	-1.12555	1935
71	Reg.ART	Reg	-10.75	-8.14	12.8	247	8.8	4.1	372	9	2000	-10.7356	-0.01399	2000
73	Reg.ART	Reg	-8.82	-6.52	13.6	199	6.8	1.9	343	18	1224	-9.52063	0.697767	1224
74	Reg.ART	Reg	-9.38	-7.01	9.8	229	3.1	1.1	186	17	608	-9.41344	0.029097	608
10	Reg.N	Reg	-7.47	-5.70	13	227	7.5	3	541	18	1637	-11.8046	4.333868	1637
46	Reg.N	Reg	-11.69	-7.51	13.2	177	5.4	2.1	287	14	1436	-10.4391	-1.24784	1436
56	Reg.N	Reg	-10.04	-9.18	14.7	332	6.3	2.4	521	22	1024	-10.0224	-0.02088	1024
61	Reg.N	Reg	-8.03	-8.16	15.2	194	5.7	1.4	321	23	935	-9.28738	1.257223	935
63	Reg.N	Reg	-9.47	-9.76	13.2	256	8.7	2.9	481	17	1824	-10.5187	1.051936	1824
65	Reg.N	Reg	-11.74	-8.02	12.4	155	4.8	1.7	445	26	1080	-10.2535	-1.48313	1080
66	Reg.N	Reg	-10.47	-7.31	10.1	289	8.7	2.2	544	25	803	-9.98757	-0.48477	803
67	Reg.N	Reg	-11.46	-8.29	13.4	354	6.2	2.5	422	17	1760	-10.3065	-1.15095	1760
68	Reg.N	Reg	-12.81	-8.83	0	166	6.5	3.1	377	12	1937	-12.5524	-0.26243	1937