

Table S1. List of top 100 most enriched genes (non-ribosomal RNAs). Related to Figure 3

	Gene name	normalized gene count in cytoRNA-2.0	fold enrichment	location of the enriched site	Enriched element	# of Alu's within 1kb near enrichment	intronic Alu contribution (intron/total)
1	BRI3BP	0.08788	113.10021	3'UTR	Alu	2	0%
2	SCAND2P	0.03714	244.20807	noncoding RNA (exon)	Alu	2	0%
3	DES11	0.02644	284.81963	3'UTR	Alu	2	0%
4	ASB16	0.02163	122.46643	3'UTR	Alu	2	0%
5	PHAX	0.01771	923.22111	3'UTR	Alu	3	0%
6	MCM8	0.01628	151.02350	3'UTR	Alu	3	0%
7	PARD6G	0.01482	772.61227	3'UTR	Alu	2	0%
8	RHOF	0.01416	119.48252	3'UTR	Alu	2	0%
9	CXorf56	0.00900	625.75499	3'UTR	Alu	2	0%
10	MREG	0.00711	475.50258	3'UTR	Alu	2	0%
11	SNRNP35	0.00682	42.86019	5'UTR	Alu	2	0%
12	GNL3L	0.00596	31.41732	3'UTR	Alu	6	0%
13	VHL	0.00554	140.15785	3'UTR, intron	Alu	5	25%
14	RBM4B	0.00520	542.18025	3'UTR, antisense	Alu	4	25%
15	POLH	0.00512	74.41849	3'UTR, intron	Alu	>8	75%
16	ACOX1	0.00472	57.15537	3'UTR	Alu	2	0%
17	TRAF3IP2	0.00455	48.73953	3'UTR	Alu	3	0%
18	LOC101927257	0.00454	128.63144	antisense	Alu	4	0%
19	MDM4	0.00435	89.58420	3'UTR	Alu	2	0%
20	XPNPEP3	0.00434	73.20855	3'UTR	Alu	8	0%
21	TAPBP	0.00430	39.91572	antisense	Alu	>8	0%
22	NOL9	0.00419	34.27297	3'UTR	Alu	4	0%
23	XIAP	0.00409	139.39803	3'UTR	Alu	6	0%
24	SLC27A1	0.00402	163.80395	3'UTR, antisense	Alu	>8	0%
25	SLC25A15	0.00380	254.10355	3'UTR	Alu	2	0%
26	PRR7-AS1	0.00341	32.54796	3'UTR, intron	Alu	2	10%
27	METTL16	0.00340	113.55439	3'UTR	Alu	2	0%
28	LINC01000	0.00338	76.29847	noncoding RNA (exon)	Non-Alu hairpin		
29	PSMB2	0.00325	37.12375	3'UTR	Alu	2	0%
30	LOC648987	0.00323	32.69639	antisense	Alu	1	0%
31	ZNF785	0.00321	81.36608	antisense	Alu	4	0%
32	TRIM59	0.00306	62.27078	3'UTR, antisense	Alu	3	0%
33	CC2D1B	0.00295	49.80539	3'UTR	Alu	2	0%
34	SYT15	0.00265	49.10028	3'UTR	Alu	3	0%
35	DENR	0.00242	44.96108	3'UTR, intron	Alu	>8	75%
36	AP1S3	0.00241	122.20568	3'UTR	Alu	3	0%
37	ZSWIM1	0.00240	70.20542	3'UTR	Alu	2	0%
38	TFDP2	0.00236	43.33546	3'UTR	Alu	6	0%
39	ZSCAN22	0.00233	59.84543	antisense	Alu	1 (nearest Alu > 2kb away)	0%
40	MCTS1	0.00229	52.46942	3'UTR, intron	Alu	3	10%
41	ZBTB8A	0.00228	237.80890	3'UTR	Alu	4	0%
42	NQO2	0.00223	112.96141	3'UTR, intron	Alu	6	20%
43	ZNF587	0.00223	#DIV/0!	3'UTR	Alu	4	0%
44	MRPL30	0.00215	87.63120	3'UTR	Alu	2	0%
45	FAM27E3	0.00212	#DIV/0!	noncoding RNA (exon)	atellite and simple_repeat		
46	SYNJ2BP	0.00210	146.26182	3'UTR	Alu	2	0%
47	WDR73	0.00206	42.41276	3'UTR	Alu	3	0%
48	NUP43	0.00199	66.39653	3'UTR	Alu	4	0%
49	COX18	0.00193	#DIV/0!	3'UTR	Alu	2	0%

50	EPN2-AS1	0.00188	130.72759	intron	Alu	2	100%
51	GNB4	0.00180	36.68895	3'UTR	Alu	3	0%
52	MED18	0.00180	177.18701	3'UTR	Alu	2	0%
53	LINC00999	0.00178	#DIV/0!	noncoding RNA (exon)	Non-Alu hairpin		
54	ZNF714	0.00178	185.08100	3'UTR	Alu	7	0%
55	ATG14	0.00172	86.87557	3'UTR	Alu	2	0%
56	ZNF557	0.00171	178.49615	3'UTR	Alu	6	0%
57	KIAA1143	0.00163	170.31857	3'UTR	Alu	2	0%
58	ACBD4	0.00162	112.89436	antisense	Alu	4	0%
59	NICN1	0.00160	#DIV/0!	3'UTR	Alu	2	0%
60	HOOK3	0.00156	52.14069	3'UTR, intron	Alu	7	10%
61	ZNF154	0.00152	76.78186	3'UTR	Alu	2	0%
62	AHR	0.00151	76.70604	3'UTR	Alu	2	0%
63	XRCC2	0.00149	50.73753	3'UTR	Alu	2	0%
64	PIK3CD	0.00148	74.90745	3'UTR/antisense	Alu	4	0%
65	MRPS16	0.00148	37.94555	3'UTR	Alu	4	0%
66	DNAJC24	0.00145	49.45985	3'UTR	Alu	2	0%
67	TMEM220	0.00141	#DIV/0!	antisense	Alu	1 (nearest Alu <2kb away)	0%
68	INPP5B	0.00141	293.31181	3'UTR	Alu	2	0%
69	MRI1	0.00140	#DIV/0!	3'UTR	Alu	4	0%
70	TBC1D22A	0.00136	282.81884	intron	Alu	2	100%
71	ZNF587	0.00130	90.26076	3'UTR, intron	Alu	4	10%
72	LYRM7	0.00128	266.15149	3'UTR	Alu	5	0%
73	LOC100996251	0.00126	124.03637	antisense	Alu	>8	0%
74	ZNF674	0.00122	253.70445	intron, 3'UTR	Alu	>8	90%
75	SBSPON	0.00119	34.71973	3'UTR	Alu	1 (nearest Alu <2kb away)	0%
76	AKAP5	0.00117	#DIV/0!	3'UTR	Alu	2	0%
77	ZNF431	0.00112	116.97496	3'UTR, intron	Alu	>8	20%
78	TMEM192	0.00111	230.45226	3'UTR	Alu	3	0%
79	ANAPC16	0.00110	229.31913	3'UTR, intron	Alu	>8	40%
80	PDE6A	0.00108	#DIV/0!	3'UTR, antisense	Alu	7	0%
81	PDDC1	0.00108	36.91368	3'UTR	Alu	7	0%
82	PTGR2	0.00107	71.80865	3'UTR, intron	Alu	6	75%
83	PPM1K	0.00103	68.70621	3'UTR	Alu	5	0%
84	OIP5-AS1	0.00098	102.62300	noncoding RNA (exon)	Alu	>8	0%
85	ZDHC20	0.00098	68.41533	3'UTR, intron	Alu	4	25%
86	ZNF417	0.00096	#DIV/0!	3'UTR	Alu	2	0%
87	ICMT	0.00095	39.65014	3'UTR	Alu	2	0%
88	LRR37A3	0.00094	195.47569	antisense	Alu	>8	0%
89	MAGT1	0.00094	65.05450	3'UTR	Alu	3	0%
90	RNF125	0.00089	59.59916	3'UTR	Alu	4	0%
91	MXRA7	0.00089	185.08100	3'UTR, intron	Alu	>8	75%
92	FUT2	0.00089	36.16590	antisense	Alu	>8	0%
93	GTPBP10	0.00088	183.12693	3'UTR	Alu	4	0%
94	NXN	0.00087	90.38120	3'UTR, intron	Alu	>8	95%
95	RBSN	0.00084	42.40090	3'UTR	Alu	3	0%
96	DENND6A	0.00083	57.68148	3'UTR	Alu	2	0%
97	ZNF101	0.00081	#DIV/0!	3'UTR	Alu	7	0%
98	LOC100128531	0.00081	33.05022	antisense	Alu	2	0%
99	GINS4	0.00080	55.34970	3'UTR	Alu	2	0%
100	FAM20B	0.00079	77.49270	3'UTR	Alu	2	0%

Genes are organized in the descending order of normalized gene counts.