

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	PANTHER Protein Class	Class ID	Mus musculus genes (26,185)	NAc sustained increase, Coc & Wit (1,387)	NAc sustained increase, Coc & Wit (expected)	NAc sustained increase, Coc & Wit (over/under)	NAc sustained increase, Coc & Wit (P-value)	NAc increase, Wit only (1,001)	NAc increase, Wit only (expected)	NAc increase, Wit only (over/under)	NAc increase, Wit only (P-value)	NAc sustained decrease, Coc & Wit (2,670)	NAc sustained decrease, Coc & Wit (expected)	NAc sustained decrease, Coc & Wit (over/under)	NAc sustained decrease, Coc & Wit (P-value)	P<0.001	NAc sustained increase, Coc & Wit P<0.0001	NAc increase, Wit only P<0.0001	NAc sustained decrease, Coc & Wit P<0.0001	Total lists
2	cytoskeletal protein	PC00126	446	46	23.62	+	2.45E-05	36	17.05	+	3.54E-05	92	45.48	+	6.02E-10	1	1	1	1	3
3	transcription factor	PC00064	2109	157	111.71	+	1.33E-05	134	80.62	+	7.09E-09	280	215.05	+	5.24E-06	1	1	1	1	3
4	transferase	PC00122	1605	147	85.02	+	1.55E-10	115	61.36	+	1.37E-10	260	163.66	+	3.71E-13	1	1	1	1	3
5	Unclassified	N/A	11104	495	588.17	-	1.92E-07	325	424.48	-	6.91E-11	1004	1132.24	-	2.45E-07	1	1	1	1	3
6	kinase	PC00152	718	90	38.03	+	2.09E-13	64	27.45	+	9.47E-10	83	73.21	+	1.36E-01	0	1	1	0	2
7	protein kinase	PC00137	549	69	29.08	+	1.26E-10	52	20.99	+	5.29E-09	56	55.98	+	5.17E-01	0	1	1	0	2
8	ribosomal protein	PC00225	498	6	26.38	-	1.79E-06	1	19.04	-	9.17E-08	44	50.78	-	1.88E-01	0	1	1	0	2
9	DNA binding protein	PC00171	525	55	27.81	+	2.64E-06	29	20.07	+	3.41E-02	97	53.53	+	4.20E-08	0	1	0	1	2
10	enzyme modulator	PC00053	939	86	49.74	+	1.18E-06	45	35.9	+	7.54E-02	152	95.75	+	3.79E-08	0	1	0	1	2
11	receptor	PC00000	1451	112	76.86	+	6.19E-05	71	55.47	+	2.19E-02	91	147.95	-	1.64E-07	0	1	0	1	2
12	actin family cytoskeletal protein	PC00085	217	18	11.49	+	4.49E-02	22	8.3	+	5.13E-05	47	22.13	+	2.52E-06	0	0	1	1	2
13	DNA helicase	PC00093	81	16	4.29	+	1.10E-05	8	3.1	+	1.40E-02	7	8.26	-	4.17E-01	0	1	0	0	1
14	G-protein modulator	PC00208	286	48	15.15	+	9.45E-12	22	10.93	+	1.97E-03	24	29.16	-	1.95E-01	0	1	0	0	1
15	guanyl-nucleotide exchange factor	PC00022	90	21	4.77	+	3.39E-08	6	3.44	+	1.34E-01	6	9.18	-	1.91E-01	0	1	0	0	1
16	oxidoreductase	PC00214	683	15	36.18	-	4.95E-05	13	26.11	-	3.30E-03	67	69.64	-	4.04E-01	0	1	0	0	1
17	transcription cofactor	PC00169	291	34	15.41	+	2.61E-05	23	11.12	+	1.12E-03	52	29.67	+	1.18E-04	0	1	0	0	1
18	transporter	PC00011	1286	128	68.12	+	1.62E-11	69	49.16	+	3.49E-03	123	131.13	+	2.50E-01	0	1	0	0	1
19	non-motor actin binding protein	PC00039	115	10	6.09	+	8.99E-02	15	4.4	+	5.42E-05	25	11.73	+	4.82E-04	0	0	1	0	1
20	phosphodiesterase	PC00097	27	4	1.43	+	5.71E-02	7	1.03	+	9.95E-05	1	2.75	-	2.39E-01	0	0	1	0	1
21	calcium-binding protein	PC00054	68	1	3.6	-	1.25E-01	2	2.6	-	5.18E-01	27	6.93	+	5.60E-09	0	0	0	1	1
22	calmodulin	PC00131	37	0	1.96	-	1.41E-01	2	1.41	+	4.13E-01	14	3.77	+	4.07E-05	0	0	0	1	1
23	chaperone	PC00151	131	6	6.94	-	4.58E-01	0	5.01	-	6.60E-03	42	13.36	+	2.66E-10	0	0	0	1	1
24	G-protein	PC00183	215	6	11.39	-	6.32E-02	7	8.22	-	4.22E-01	55	21.92	+	1.77E-09	0	0	0	1	1
25	G-protein coupled receptor	PC00197	743	50	39.36	+	5.45E-02	31	28.4	+	3.36E-01	36	75.76	-	2.11E-07	0	0	0	1	1
26	glycosyltransferase	PC00038	242	16	12.82	+	2.20E-01	21	9.25	+	5.80E-04	47	24.68	+	3.73E-05	0	0	0	1	1
27	intracellular calcium-sensing protein	PC00060	37	0	1.96	-	1.41E-01	2	1.41	+	4.13E-01	14	3.77	+	4.07E-05	0	0	0	1	1
28	isomerase	PC00114	97	3	5.14	-	2.46E-01	4	3.71	+	5.08E-01	33	9.89	+	5.17E-09	0	0	0	1	1
29	ligand-gated ion channel	PC00124	237	12	12.55	-	5.13E-01	7	9.06	-	3.16E-01	4	24.17	+	5.00E-07	0	0	0	1	1
30	membrane traffic protein	PC00124	329	31	17.43	+	1.96E-03	17	12.58	+	1.34E-01	61	33.55	+	1.14E-05	0	0	0	1	1
31	microtubule family cytoskeletal protein	PC00040	167	22	8.85	+	1.30E-04	10	6.38	+	1.12E-01	39	17.03	+	3.22E-06	0	0	0	1	1
32	mRNA processing factor	PC00033	201	9	10.65	-	3.79E-01	9	7.68	+	3.63E-01	62	20.5	+	8.97E-14	0	0	0	1	1
33	neuropeptide	PC00179	25	1	1.32	-	6.18E-01	0	0.96	-	3.84E-01	13	2.55	+	2.88E-06	0	0	0	1	1
34	nucleic acid binding	PC00217	1964	115	104.03	+	1.43E-01	78	75.08	+	3.80E-01	351	200.26	+	3.73E-24	0	0	0	1	1
35	nucleotidyltransferase	PC00045	96	3	5.09	-	2.53E-01	7	3.67	+	7.88E-02	26	9.79	+	1.18E-05	0	0	0	1	1
36	phosphatase modulator	PC00139	66	3	3.5	-	5.37E-01	1	2.52	-	2.82E-01	20	6.73	+	2.52E-05	0	0	0	1	1
37	protein phosphatase	PC00181	110	11	5.83	+	3.55E-02	6	4.21	+	2.47E-01	28	11.22	+	1.68E-05	0	0	0	1	1
38	replication origin binding protein	PC00015	53	3	2.81	+	5.32E-01	2	2.03	-	6.70E-01	17	5.4	+	5.00E-05	0	0	0	1	1
39	RNA binding protein	PC00011	1122	39	59.43	-	2.66E-03	26	42.89	-	3.26E-03	223	114.41	+	1.75E-20	0	0	0	1	1
40	RNA helicase	PC00094	69	5	3.65	+	3.04E-01	6	2.64	+	5.16E-02	20	7.04	+	4.61E-05	0	0	0	1	1
41	small GTPase	PC00117	158	5	8.37	-	1.59E-01	3	6.04	-	1.47E-01	45	16.11	+	2.31E-09	0	0	0	1	1
42	translation factor	PC00201	75	4	3.97	+	5.61E-01	0	2.87	-	5.66E-02	29	7.65	+	2.78E-09	0	0	0	1	1
43	viral coat protein	PC00237	138	2	7.31	-	2.32E-02	1	5.28	-	3.18E-02	2	14.07	-	8.59E-05	0	0	0	1	1
44	viral protein	PC00025	139	2	7.36	-	2.23E-02	1	5.31	-	3.08E-02	2	14.17	-	7.86E-05	0	0	0	1	1
45	acetyltransferase	PC00215	108	12	5.72	+	1.43E-02	6	4.13	+	2.35E-01	21	11.01	+	4.64E-03	0	0	0	0	0
46	actin and actin related protein	PC00041	30	0	1.59	-	2.04E-01	4	1.15	+	2.93E-02	6	3.06	+	8.99E-02	0	0	0	0	0
47	actin binding motor protein	PC00165	8	0	0.42	-	6.55E-01	0	0.31	-	7.36E-01	3	0.82	+	4.97E-02	0	0	0	0	0
48	acyltransferase	PC00216	83	3	4.4	-	3.60E-01	4	3.17	+	3.92E-01	20	8.46	+	4.95E-04	0	0	0	0	0
49	adenylate cyclase	PC00079	22	6	1.17	+	1.29E-03	3	0.84	+	5.34E-02	0	2.24	+	1.06E-01	0	0	0	0	0
50	aldolase	PC00144	7	0	0.37	-	6.90E-01	1	0.27	+	2.35E-01	1	0.71	+	5.10E-01	0	0	0	0	0
51	amino acid kinase	PC00172	5	1	0.26	+	2.33E-01	0	0.19	-	8.26E-01	0	0.51	-	6.01E-01	0	0	0	0	0
52	amino acid transporter	PC00067	106	9	5.61	+	1.15E-01	5	4.05	+	3.81E-01	7	10.81	-	1.55E-01	0	0	0	0	0
53	aminoacyl-tRNA synthetase	PC00234	20	1	1.06	-	7.14E-01	1	0.76	+	5.35E-01	5	2.04	+	5.62E-02	0	0	0	0	0
54	amylase	PC00053	10	0	0.53	-	5.89E-01	1	0.38	+	3.18E-01	0	1.02	-	3.61E-01	0	0	0	0	0
55	anion channel	PC00213	39	2	2.07	-	6.59E-01	1	1.49	-	5.61E-01	7	3.98	+	1.08E-01	0	0	0	0	0
56	annexin	PC00106	9	1	0.48	+	3.79E-01	0	0.34	-	7.09E-01	5	0.92	+	2.54E-03	0	0	0	0	0
57	antibacterial response protein	PC00149	29	1	1.54	-	5.46E-01	1	1.11	-	6.96E-01	0	2.96	-	5.19E-02	0	0	0	0	0
58	apolipoprotein	PC00219	44	4	2.33	+	2.07E-01	3	1.68	+	2.38E-01	3	4.49	-	3.44E-01	0	0	0	0	0
59	aspartic protease	PC00203	17	2	0.9	+	2.28E-01	0	0.65	-	5.22E-01	3	1.73	+	2.52E-01	0	0	0	0	0
60	ATP synthase	PC00068	56	3	2.97	+	5.69E-01	1	2.14	-	3.69E-01	16	5.71	+	2.95E-04	0	0	0	0	0
61	ATP-binding cassette (ABC) transporter	PC00002	79	10	4.18	+	1.08E-02	8	3.02	+	1.22E-02	4	8.06	+	9.62E-02	0	0	0	0	0
62	basic helix-loop-helix transcription factor	PC00024	117	4	6.2	-	2.59E-01	3	4.47	-	3.46E-01	13	11.93	+	4.16E-01	0	0	0	0	0
63	basic leucine zipper transcription factor	PC00055	25	3	1.32	+	1.48E-01	3	0.96	+	7.22E-02	6	2.55	+	4.53E-02	0	0	0	0	0
64	calcium channel	PC00133	31	8	1.64	+	3.05E-04	3	1.19	+	1.17E-01	3	3.16	-	6.11E-01	0	0	0	0	0
65	calsequestrin	PC00238	2	0	0.11	-	8.99E-01	0	0.08	-	9.26E-01	0	0.2	-	8.16E-01	0	0	0	0	0
66	carbohydrate kinase	PC00167	38	1	2.01	-	4.02E-01	2	1.45	+	4.26E-01	10	3.87	+	6.56E-03	0	0	0	0	0
67	carbohydrate phosphatase	PC00195	10	0	0.53	-	5.89E-01	0	0.38	-	6.82E-01	0	1.02	-	3.61E-01	0	0	0	0	0
68	carbohydrate transporter	PC00003	50	7	2.65	+	1.87E-02	2	1.91	+	5.70E-01	6	5.1	+	4.01E-01	0	0	0	0	0
69	cation transporter	PC00239	185	23	9.8	+	2.10E-04	4	7.07	-	1.66E-01	27	18.86	+	4.47E-02	0	0	0	0	0

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
70	cell adhesion molecule	PC00107	116	4	6.14	-	2.66E-01	5	4.43	+	4.56E-01	7	11.83	-	9.68E-02	0	0	0	0	0
71	cell junction protein	PC00101	85	4	4.5	-	5.31E-01	4	3.25	+	4.09E-01	8	8.67	-	5.00E-01	0	0	0	0	0
72	centromere DNA-binding protein	PC00017	16	2	0.85	+	2.08E-01	0	0.61	-	5.42E-01	3	1.63	+	2.25E-01	0	0	0	0	0
73	chaperonin	PC00072	24	1	1.27	-	6.37E-01	0	0.92	-	3.99E-01	9	2.45	+	9.78E-04	0	0	0	0	0
74	chemokine	PC00225	53	0	2.81	-	6.02E-02	0	2.03	-	1.32E-01	2	5.4	-	9.43E-02	0	0	0	0	0
75	chromatin/chromatin-binding protein	PC00118	89	11	4.71	+	9.09E-03	4	3.4	+	4.42E-01	22	9.08	+	1.90E-04	0	0	0	0	0
76	CREB transcription factor	PC00056	25	3	1.32	+	1.48E-01	3	0.96	+	7.22E-02	6	2.55	+	4.53E-02	0	0	0	0	0
77	cyclase	PC00089	24	6	1.27	+	1.98E-03	3	0.92	+	6.57E-02	0	2.45	-	8.64E-02	0	0	0	0	0
78	cysteine protease	PC00153	124	10	6.57	+	1.28E-01	8	4.74	+	1.07E-01	18	12.64	+	9.05E-02	0	0	0	0	0
79	cysteine protease inhibitor	PC00154	32	2	1.7	+	5.05E-01	0	1.22	-	2.94E-01	4	3.26	+	4.11E-01	0	0	0	0	0
80	cytokine	PC00207	178	2	9.43	-	4.32E-03	3	6.8	-	9.18E-02	13	18.15	-	1.34E-01	0	0	0	0	0
81	cytokine receptor	PC00205	261	19	13.82	+	1.07E-01	5	9.98	-	6.70E-02	10	26.61	-	2.00E-04	0	0	0	0	0
82	damaged DNA-binding protein	PC00071	44	5	2.33	+	8.72E-02	5	1.68	+	2.84E-02	7	4.49	+	1.67E-01	0	0	0	0	0
83	deacetylase	PC00048	2	0	0.11	-	8.99E-01	0	0.08	-	9.26E-01	0	0.2	-	8.16E-01	0	0	0	0	0
84	deaminase	PC00087	13	1	0.69	+	4.98E-01	2	0.5	+	8.92E-02	2	1.33	+	3.82E-01	0	0	0	0	0
85	decarboxylase	PC00120	21	1	1.11	-	6.94E-01	1	0.8	+	5.52E-01	6	2.14	+	2.22E-02	0	0	0	0	0
86	defense/immunity protein	PC00047	151	5	8	-	1.91E-01	3	5.77	-	1.72E-01	9	15.4	-	5.75E-02	0	0	0	0	0
87	dehydratase	PC00044	30	1	1.59	-	5.28E-01	3	1.15	+	1.09E-01	4	3.06	+	3.66E-01	0	0	0	0	0
88	dehydrogenase	PC00180	263	7	13.93	-	3.22E-02	5	10.05	-	6.41E-02	29	26.82	+	3.61E-01	0	0	0	0	0
89	DNA glycosylase	PC00012	15	0	0.79	-	4.52E-01	0	0.57	-	5.64E-01	1	1.53	-	5.48E-01	0	0	0	0	0
90	DNA ligase	PC00014	10	1	0.53	+	4.11E-01	0	0.38	-	6.82E-01	2	1.02	+	2.71E-01	0	0	0	0	0
91	DNA methyltransferase	PC00010	17	2	0.9	+	2.28E-01	1	0.65	+	4.78E-01	4	1.73	+	9.82E-02	0	0	0	0	0
92	DNA photolyase	PC00199	2	0	0.11	-	8.99E-01	1	0.08	+	7.36E-02	0	0.2	-	8.16E-01	0	0	0	0	0
93	DNA polymerase processivity factor	PC00018	2	0	0.11	-	8.99E-01	0	0.08	-	9.26E-01	1	0.2	+	1.84E-01	0	0	0	0	0
94	DNA strand-pairing protein	PC00086	7	0	0.37	-	6.90E-01	0	0.27	-	7.65E-01	0	0.71	-	4.90E-01	0	0	0	0	0
95	DNA topoisomerase	PC00013	4	0	0.21	-	8.09E-01	0	0.15	-	8.58E-01	1	0.41	+	3.35E-01	0	0	0	0	0
96	DNA-directed DNA polymerase	PC00009	10	0	0.53	-	5.89E-01	1	0.38	+	3.18E-01	1	1.02	-	7.29E-01	0	0	0	0	0
97	DNA-directed RNA polymerase	PC00200	16	0	0.85	-	4.28E-01	1	0.61	+	4.58E-01	4	1.63	+	8.32E-02	0	0	0	0	0
98	endodeoxyribonuclease	PC00098	18	3	0.95	+	7.19E-02	1	0.69	+	4.98E-01	5	1.84	+	3.90E-02	0	0	0	0	0
99	endoribonuclease	PC00099	51	2	2.7	-	4.93E-01	1	1.95	-	4.20E-01	6	5.2	+	4.19E-01	0	0	0	0	0
100	epimerase/racemase	PC00135	7	1	0.37	+	3.10E-01	0	0.27	-	7.65E-01	5	0.71	+	8.54E-04	0	0	0	0	0
101	esterase	PC00186	31	0	1.64	-	1.93E-01	1	1.19	-	6.68E-01	6	3.16	+	1.01E-01	0	0	0	0	0
102	exodeoxyribonuclease	PC00077	1	0	0.05	-	9.48E-01	0	0.04	-	9.62E-01	1	0.1	+	9.69E-02	0	0	0	0	0
103	exoribonuclease	PC00202	25	2	1.32	+	3.82E-01	0	0.96	-	3.84E-01	7	2.55	+	1.56E-02	0	0	0	0	0
104	extracellular matrix glycoprotein	PC00103	56	6	2.97	+	8.03E-02	8	2.14	+	1.65E-03	3	5.71	-	1.79E-01	0	0	0	0	0
105	extracellular matrix protein	PC00130	78	7	4.13	+	1.25E-01	10	2.98	+	1.03E-03	10	7.95	+	2.77E-01	0	0	0	0	0
106	extracellular matrix structural protein	PC00102	11	1	0.58	+	4.42E-01	1	0.42	+	3.43E-01	5	1.12	+	5.87E-03	0	0	0	0	0
107	galactosidase	PC00108	10	1	0.53	+	4.11E-01	0	0.38	-	6.82E-01	1	1.02	-	7.29E-01	0	0	0	0	0
108	gap junction	PC00070	20	0	1.06	-	3.47E-01	1	0.76	+	5.35E-01	3	2.04	+	3.34E-01	0	0	0	0	0
109	glucosidase	PC00110	13	0	0.69	-	5.02E-01	0	0.5	-	6.08E-01	0	1.33	-	2.66E-01	0	0	0	0	0
110	glycosidase	PC00196	30	2	1.59	+	4.72E-01	3	1.15	+	1.09E-01	5	3.06	+	1.95E-01	0	0	0	0	0
111	growth factor	PC00007	186	7	9.85	-	2.33E-01	5	7.11	-	2.86E-01	14	18.97	-	1.51E-01	0	0	0	0	0
112	helicase	PC00094	5	0	0.26	-	7.67E-01	1	0.19	+	1.74E-01	0	0.51	-	6.01E-01	0	0	0	0	0
113	helix-turn-helix transcription factor	PC00006	290	3	15.36	-	1.49E-04	12	11.09	+	4.31E-01	22	29.57	-	9.12E-02	0	0	0	0	0
114	heterotrimeric G-protein	PC00020	45	1	2.38	-	3.12E-01	4	1.72	+	9.61E-02	9	4.59	+	4.44E-02	0	0	0	0	0
115	histone	PC00016	81	1	4.29	-	7.22E-02	3	3.1	-	6.26E-01	10	8.26	+	3.16E-01	0	0	0	0	0
116	HMG box transcription factor	PC00029	65	2	3.44	-	3.31E-01	3	2.48	+	4.52E-01	11	6.63	+	7.40E-02	0	0	0	0	0
117	homeobox transcription factor	PC00116	290	3	15.36	-	1.49E-04	12	11.09	+	4.31E-01	22	29.57	-	9.12E-02	0	0	0	0	0
118	Hsp70 family chaperone	PC00026	13	0	0.69	-	5.02E-01	0	0.5	-	6.08E-01	3	1.33	+	1.49E-01	0	0	0	0	0
119	Hsp90 family chaperone	PC00027	4	0	0.21	-	8.09E-01	0	0.15	-	8.58E-01	2	0.41	+	6.37E-02	0	0	0	0	0
120	hydrolase	PC00187	456	26	24.15	+	3.80E-01	29	17.43	+	6.44E-03	56	46.5	+	9.41E-02	0	0	0	0	0
121	hydroxylase	PC00175	75	2	3.97	-	2.42E-01	2	2.87	-	4.53E-01	5	7.65	-	2.25E-01	0	0	0	0	0
122	immunoglobulin	PC00051	68	0	3.6	-	2.71E-02	0	2.6	-	7.41E-02	0	6.93	-	9.66E-04	0	0	0	0	0
123	immunoglobulin receptor superfamily	PC00075	201	11	10.65	+	4.98E-01	4	7.68	-	1.18E-01	6	20.5	-	1.71E-04	0	0	0	0	0
124	immunoglobulin superfamily cell adhesion mo	PC00069	40	0	2.12	-	1.20E-01	0	1.53	-	2.16E-01	1	4.08	-	8.58E-02	0	0	0	0	0
125	interferon superfamily	PC00128	27	0	1.43	-	2.39E-01	0	1.03	-	3.56E-01	0	2.75	-	6.36E-02	0	0	0	0	0
126	interleukin superfamily	PC00083	35	1	1.85	-	4.47E-01	0	1.34	-	2.62E-01	2	3.57	-	3.08E-01	0	0	0	0	0
127	intermediate filament	PC00156	10	0	0.53	-	5.89E-01	1	0.38	+	3.18E-01	1	1.02	-	7.29E-01	0	0	0	0	0
128	intermediate filament binding protein	PC00129	10	0	0.53	-	5.89E-01	1	0.38	+	3.18E-01	1	1.02	-	7.29E-01	0	0	0	0	0
129	ion channel	PC00227	477	42	25.27	+	1.28E-03	21	18.23	+	2.87E-01	28	48.64	-	8.71E-04	0	0	0	0	0
130	kinase activator	PC00140	42	4	2.22	+	1.85E-01	0	1.61	-	2.01E-01	9	4.28	+	3.09E-02	0	0	0	0	0
131	kinase inhibitor	PC00138	16	0	0.85	-	4.28E-01	0	0.61	-	5.42E-01	1	1.63	-	5.15E-01	0	0	0	0	0
132	kinase modulator	PC00095	105	12	5.56	+	1.17E-02	4	4.01	-	6.26E-01	15	10.71	+	1.25E-01	0	0	0	0	0
133	KRAB box transcription factor	PC00244	421	31	22.3	+	4.54E-02	22	16.09	+	9.15E-02	29	42.93	-	1.53E-02	0	0	0	0	0
134	ligase	PC00160	274	21	14.51	+	6.32E-02	19	10.47	+	1.09E-02	45	27.94	+	1.70E-03	0	0	0	0	0
135	lipase	PC00121	73	0	3.87	-	2.08E-02	4	2.79	+	3.06E-01	3	7.44	-	6.11E-02	0	0	0	0	0
136	lyase	PC00104	112	11	5.93	+	3.96E-02	8	4.28	+	6.93E-02	18	11.42	+	4.30E-02	0	0	0	0	0
137	major histocompatibility complex antigen	PC00078	20	3	1.06	+	9.15E-02	2	0.76	+	1.78E-01	2	2.04	-	6.66E-01	0	0	0	0	0
138	membrane trafficking regulatory protein	PC00034	115	9	6.09	+	1.62E-01	7	4.4	+	1.55E-01	20	11.73	+	1.70E-02	0	0	0	0	0
139	membrane-bound signaling molecule	PC00162	175	14	9.27	+	8.75E-02	6	6.69	-	4.97E-01	23	17.84	+	1.36E-01	0	0	0	0	0
140	metalloprotease	PC00190	165	11	8.74	+	2.63E-01	12	6.31	+	2.75E-02	12	16.82	-	1.43E-01	0	0	0	0	0
141	metalloprotease inhibitor	PC00191	4	0	0.21	-	8.09E-01	0	0.15	-	8.58E-01	0	0.41	-	6.65E-01	0				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
143	microtubule binding motor protein	PC00166	53	11	2.81	+	1.64E-04	5	2.03	+	5.49E-02	4	5.4	-	3.72E-01	0	0	0	0	0
144	mitochondrial carrier protein	PC00046	19	0	1.01	-	3.65E-01	0	0.73	-	4.84E-01	0	1.94	-	1.44E-01	0	0	0	0	0
145	mutase	PC00096	11	0	0.58	-	5.58E-01	1	0.42	+	3.43E-01	3	1.12	+	1.04E-01	0	0	0	0	0
146	myelin protein	PC00211	28	1	1.48	-	5.63E-01	2	1.07	+	2.90E-01	8	2.86	+	9.03E-03	0	0	0	0	0
147	neurotrophic factor	PC00112	9	0	0.48	-	6.21E-01	0	0.34	-	7.09E-01	2	0.92	+	2.34E-01	0	0	0	0	0
148	non-motor microtubule binding protein	PC00228	51	9	2.7	+	1.90E-03	2	1.95	+	5.80E-01	15	5.2	+	3.34E-04	0	0	0	0	0
149	nuclear hormone receptor	PC00080	47	3	2.49	+	4.54E-01	2	1.8	+	5.36E-01	5	4.79	+	5.22E-01	0	0	0	0	0
150	nuclease	PC00032	40	2	2.12	-	6.45E-01	4	1.53	+	6.92E-02	10	4.08	+	9.17E-03	0	0	0	0	0
151	nucleotide kinase	PC00065	49	6	2.6	+	4.85E-02	4	1.87	+	1.21E-01	6	5	+	3.83E-01	0	0	0	0	0
152	nucleotide phosphatase	PC00066	37	0	1.96	-	1.41E-01	3	1.41	+	1.70E-01	5	3.77	+	3.27E-01	0	0	0	0	0
153	oxidase	PC00198	64	1	3.39	-	1.48E-01	2	2.45	-	5.57E-01	6	6.53	-	5.22E-01	0	0	0	0	0
154	oxygenase	PC00176	89	2	4.71	-	1.50E-01	2	3.4	-	3.39E-01	7	9.08	-	3.15E-01	0	0	0	0	0
155	peptide hormone	PC00163	173	10	9.16	+	4.34E-01	7	6.61	+	4.92E-01	28	17.64	+	1.35E-02	0	0	0	0	0
156	peroxidase	PC00177	29	1	1.54	-	5.46E-01	0	1.11	-	3.30E-01	0	2.96	-	5.19E-02	0	0	0	0	0
157	phosphatase	PC00045	236	20	12.5	+	3.00E-02	16	9.02	+	2.19E-02	44	24.06	+	1.56E-04	0	0	0	0	0
158	phosphatase activator	PC00184	1	0	0.05	-	9.48E-01	0	0.04	-	9.62E-01	1	0.1	+	9.69E-02	0	0	0	0	0
159	phosphatase inhibitor	PC00182	30	1	1.59	-	5.28E-01	0	1.15	-	3.17E-01	10	3.06	+	1.26E-03	0	0	0	0	0
160	phospholipase	PC00143	39	0	2.07	-	1.27E-01	4	1.49	+	6.44E-02	3	3.98	-	4.38E-01	0	0	0	0	0
161	phosphorylase	PC00042	14	0	0.74	-	4.76E-01	0	0.54	-	5.85E-01	3	1.43	+	1.73E-01	0	0	0	0	0
162	potassium channel	PC00243	85	14	4.5	+	2.45E-04	6	3.25	+	1.11E-01	10	8.67	+	3.69E-01	0	0	0	0	0
163	primase	PC00019	1	0	0.05	-	9.48E-01	0	0.04	-	9.62E-01	1	0.1	+	9.69E-02	0	0	0	0	0
164	protease	PC00173	550	32	29.13	+	3.20E-01	31	21.03	+	2.32E-02	60	56.08	+	3.16E-01	0	0	0	0	0
165	protease inhibitor	PC00113	162	4	8.58	-	7.03E-02	4	6.19	-	2.59E-01	8	16.52	-	1.63E-02	0	0	0	0	0
166	protein kinase receptor	PC00021	2	0	0.11	-	8.99E-01	0	0.08	-	9.26E-01	0	0.2	-	8.16E-01	0	0	0	0	0
167	pyrophosphatase	PC00088	5	0	0.26	-	7.67E-01	0	0.19	-	8.26E-01	2	0.51	+	9.32E-02	0	0	0	0	0
168	reductase	PC00092	76	2	4.03	-	2.34E-01	2	2.91	-	4.44E-01	11	7.75	+	1.60E-01	0	0	0	0	0
169	reverse transcriptase	PC00031	5	1	0.26	+	2.33E-01	0	0.19	-	8.26E-01	0	0.51	+	6.01E-01	0	0	0	0	0
170	ribonucleoprotein	PC00148	57	2	3.02	-	4.19E-01	1	2.18	-	3.59E-01	17	5.81	+	1.18E-04	0	0	0	0	0
171	RNA methyltransferase	PC00189	21	0	1.11	-	3.29E-01	0	0.8	-	4.48E-01	4	2.14	+	1.69E-01	0	0	0	0	0
172	serine protease	PC00081	191	5	10.12	-	6.21E-02	9	7.3	+	3.11E-01	10	19.48	-	1.40E-02	0	0	0	0	0
173	serine protease inhibitor	PC00082	120	2	6.36	-	4.75E-02	4	4.59	-	5.15E-01	3	12.24	-	1.88E-03	0	0	0	0	0
174	signaling molecule	PC00169	1047	65	55.46	+	1.09E-01	42	40.02	+	3.97E-01	122	106.76	+	7.49E-02	0	0	0	0	0
175	SNARE protein	PC00235	41	2	2.17	-	6.30E-01	0	1.57	-	2.08E-01	11	4.18	+	3.90E-03	0	0	0	0	0
176	sodium channel	PC00240	20	2	1.06	+	2.86E-01	0	0.76	-	4.65E-01	2	2.04	-	6.66E-01	0	0	0	0	0
177	storage protein	PC00181	25	1	1.32	-	6.18E-01	1	0.96	+	6.16E-01	2	2.55	-	5.31E-01	0	0	0	0	0
178	structural protein	PC00226	297	10	15.73	-	8.58E-02	9	11.35	-	3.02E-01	28	30.28	-	3.82E-01	0	0	0	0	0
179	surfactant	PC00210	14	0	0.74	-	4.76E-01	2	0.54	+	1.01E-01	0	1.43	-	2.40E-01	0	0	0	0	0
180	TGF-beta receptor	PC00232	2	1	0.11	+	1.01E-01	0	0.08	-	9.26E-01	0	0.2	-	8.16E-01	0	0	0	0	0
181	tight junction	PC00105	47	2	2.49	-	5.46E-01	2	1.8	+	5.36E-01	2	4.79	-	1.43E-01	0	0	0	0	0
182	transaldolase	PC00221	1	0	0.05	-	9.48E-01	0	0.04	-	9.62E-01	1	0.1	+	9.69E-02	0	0	0	0	0
183	transaminase	PC00111	25	2	1.32	+	3.82E-01	1	0.96	+	6.16E-01	5	2.55	+	1.15E-01	0	0	0	0	0
184	transfer/carrier protein	PC00158	310	9	16.42	-	3.43E-02	13	11.85	+	4.07E-01	49	31.61	+	2.33E-03	0	0	0	0	0
185	transketolase	PC00033	5	0	0.26	-	7.67E-01	0	0.19	-	8.26E-01	0	0.51	-	6.01E-01	0	0	0	0	0
186	transmembrane receptor regulatory/adaptor pr	PC00236	83	13	4.4	+	6.37E-04	11	3.17	+	4.51E-04	8	8.46	-	5.28E-01	0	0	0	0	0
187	tubulin	PC00157	22	0	1.17	-	3.12E-01	2	0.84	+	2.06E-01	8	2.24	+	2.21E-03	0	0	0	0	0
188	tumor necrosis factor family member	PC00036	10	0	0.53	-	5.89E-01	0	0.38	-	6.82E-01	1	1.02	-	7.29E-01	0	0	0	0	0
189	tumor necrosis factor receptor	PC00035	22	4	1.17	+	3.08E-02	1	0.84	+	5.69E-01	2	2.24	-	6.11E-01	0	0	0	0	0
190	type I cytokine receptor	PC00084	32	3	1.7	+	2.41E-01	0	1.22	-	2.94E-01	1	3.26	-	1.63E-01	0	0	0	0	0
191	ubiquitin-protein ligase	PC00012	135	16	7.15	+	2.87E-03	13	5.16	+	2.56E-03	25	13.77	+	4.00E-03	0	0	0	0	0
192	vesicle coat protein	PC00150	32	4	1.7	+	9.23E-02	1	1.22	-	6.54E-01	11	3.26	+	5.76E-04	0	0	0	0	0
193	voltage-gated ion channel	PC00080	1	0	0.05	-	9.48E-01	0	0.04	-	9.62E-01	0	0.1	-	9.03E-01	0	0	0	0	0
194	zinc finger transcription factor	PC00218	697	52	36.92	+	1.01E-02	46	26.64	+	3.40E-04	68	71.07	-	3.85E-01	0	0	0	0	0