Supplementary Information, Table S9 GO categories for genes identified using

SwaanFindar (avtra astagories not presented in the main text)	
Sweeprinder (extra categories not presented in the main text).	

	Canaval nyaaaaaa		
ME	General processes	6	2 41E 04
1911	avidoreductase activity acting on paired donors, with incorporation or	0	2.41L-04
ME	reduction of molecular oxygen reduced flavin or flavoprotein as one donor	6	3 90F-04
1411	and incorporation of one atom of oxygen	0	5.70L 04
MF	mRNA hinding	9	4 18E-04
MF	glutathione transferase activity	5	0.001685
MF	cysteine-type endopentidase inhibitor activity	6	0.002341
MF	peptidase inhibitor activity	11	0.005357
CC	Membrane fraction	37	0.006249
CC	cell fraction	46	0.008333
MF	heme binding	9	0.009191
MF	transferase activity, transferring alkyl or aryl (other than methyl) groups	6	0.009448
MF	enzyme inhibitor activity	15	0.009496
BP	extracellular structure organization	11	0.010049
CC	insoluble fraction	37	0.010956
MF	endopeptidase inhibitor activity	10	0.012164
MF	tetrapyrrole binding	9	0.014291
ME	Framingham Heart Study 100K Project: genome-wide associations for	4	0.015267
MIL	blood pressure and arterial stiffness	4	0.013207
MF	adenyl ribonucleotide binding	56	0.016595
MF	phosphoinositide binding	8	0.022863
MF	ribonucleotide binding	65	0.023476
MF	purine ribonucleotide binding	65	0.023476
MF	nucleotide binding	77	0.027053
MF	adenyl nucleotide binding	57	0.029545
MF	hydrolase activity, acting on acid anhydrides, catalyzing transmembrane movement of substances	8	0.036772
MF	purine nucleoside binding	57	0.037498
BP	receptor internalization	3	0.03783
CC	microsome	13	0.03809
MF	purine nucleotide binding	66	0.038889
BP	positive regulation of cell-substrate adhesion	4	0.04086
MF	nucleoside binding	57	0.041348
BP	RNA splicing	14	0.042548
	vesicular fraction	13	0.045237
MF	cytoskeletal protein binding	22	0.04622
МГ МЕ	Ras GTPase activator activity	/	0.040805
	mDNA processing	4	0.04923
DP ME	avtracelluler ligand gated ion channel activity	15	0.031933
МГ RD	nucleotide excision repair	5	0.053977
ME	alkana 1. monooyuganasa activity	2	0.054155
ME	nyridoval phosphata hinding	5	0.058551
ME	vitamin B6 hinding	5	0.000020
MF	nhospholinid hinding	10	0.061365
1911	RNA splicing via transesterification reactions with bulged adenosine as	10	0.001505
BP	nucleophile	9	0.062246
	NIVA spitcing, via transesterification reactions	9	0.062240
	nuclear mixing spinong, via spinoeosome	9 1	0.062495
Dr Me	ligand gatad channel activity	4 0	0.002483
ME	ligand gated channel activity	ð	0.0041/4 0.064174
ME	nganu-gateu ion channel activity	0 11	0.0041/4
CC	non-membrane-bounded organelle	85	0.003911
	intracellular non-membrane-bounded organelle	85	0.003947
BP	extracellular matrix organization	7	0.066838

CC	nuclear body	10	0.069384
BP	regulation of cell adhesion	8	0.069677
MF	ionotropic glutamate receptor activity	3	0.071664
BP	positive regulation of cell adhesion	5	0.071908
CC	Cajal body	4	0.075773
MF	lipid binding	19	0.076017
MF	extracellular-glutamate-gated ion channel activity	3	0.080341
MF	GTPase activator activity	11	0.081255
CC	extracellular matrix	16	0.083184
BP	negative regulation of activin receptor signaling pathway	2	0.083383
BP	Genome-wide association analysis of susceptibility and clinical phenotype	4	0.085307
	in multiple sclerosis		0.00
BP	cell projection assembly	6	0.085543
MF	aryl hydrocarbon receptor binding	2	0.086532
CC	proteinaceous extracellular matrix	15	0.08953
MF	oxygen binding	4	0.090488
CC	cytoskeleton	47	0.094495
MF	SNARE binding	4	0.096408
DD	Metabolism and motility	~	0.00500.
Rh	purine ribonucleotide metabolic process	9	0.027004
BP	purine ribonucleoside triphosphate metabolic process	8	0.032259
BP	ribonucleoside triphosphate metabolic process	8	0.033707
BP	regulation of catabolic process	7	0.05025
BP	purine nucleotide metabolic process	10	0.058845
BP	nucleobase, nucleoside and nucleotide biosynthetic process	10	0.069829
BP	response to drug	11	0.071894
CC	myosin filament	3	0.077248
BP	purine ribonucleotide biosynthetic process	7	0.080424
BP	ATP biosynthetic process	6	0.085543
MF	ATPase activity, coupled to transmembrane movement of substances	7	0.086168
BP	tRNA metabolic process	7	0.086261
CC	muscle myosin complex	3	0.086529
MF	ATP-dependent protein binding	2	0.086532
MF	ATPase activity, coupled to movement of substances	7	0.08929
BP	purine nucleotide biosynthetic process	8	0.092541
BP	lipid transport	8	0.092541
	Sexual reproduction		
KEGG	hsa04114:Oocyte meiosis	7	0.059439
BP	spermatid differentiation	5	0.060924
BP	reproductive cellular process	9	0.064227
	Neurological process and perception		-
BP	synaptic vesicle transport	4	0.062485
BP	neurotransmitter secretion	4	0.062485
BP	behavior	19	0.065582
BP	transmission of nerve impulse	15	0.079678
CC	postsynaptic membrane	8	0.09391
	r	0	0.0/0/1