

TABLE S1. Top 100 most-sequenced ESTs in the FN-bound amoeboid cDNA library compared with trophozoite cDNA library.

Locus	Annotation	TvF ^a	TvE	Functional classification ^b
TVAG_146910	Glyceraldehyde 3-phosphate dehydrogenase	457	198	Glycolysis
TVAG_114310	Thioredoxin/tryparedoxin peroxidase	424	10	Antioxidant activity, Oxidoreductase activity
	Hypothetical protein	411	93	Function unkown
TVAG_200190	Actin	329	267	Protein binding
TVAG_190450	Actinin-Alpha	291	116	Proteolysis and peptidolysis ; Cell adhesion
TVAG_171090	Lactate dehydrogenase	205	13	Oxidoreductase activity; Malate dehydrogenase activity
TVAG_337230	Iron superoxide dismutase	181	6	Superoxide dismutase activity; Metal ion binding
TVAG_464170	Enolase 4	181	106	Glycolysis
TVAG_073860	Pyruvate phosphate dikinase	149	47	Microtubule-based process
TVAG_039980	Iron superoxide dismutase	143	2	Superoxide dismutase activity; Metal ion binding
TVAG_049830	Rubredoxin, Pyridine nucleotide-disulphide oxidoreductase	106	46	Anti-oxidation
TVAG_120340	Iron superoxide dismutase	101	3	Superoxide dismutase activity; Metal ion binding
TVAG_067400	Elongation factor 1 alpha	94	167	Protein biosynthesis
TVAG_061930	Glucose-6-phosphate isomerase	90	33	Gluconeogenesis
TVAG_381310	Lactate dehydrogenase	87	15	Oxidoreductase activity; Malate dehydrogenase activity
TVAG_276410	Elongation factor 2	84	59	Protein biosynthesis
TVAG_204360	Malate dehydrogenase, cytosolic	78	56	Oxidoreductase activity ; Malate dehydrogenase activity
TVAG_268050	Phosphoglycerate kinase	78	70	Glycolysis
TVAG_038090	Thioredoxin/tryparedoxin peroxidase	74	1	Antioxidant activity, oxidoreductase activity
TVAG_216170	Hydrogenosomal membrane protein	69	4	Electron transport
TVAG_253650	Malate dehydrogenase, cytosolic	68	83	Oxidoreductase activity; Malate dehydrogenase activity
TVAG_477640	Transmembrane protein Type I, with intron	61	24	Function unkown
TVAG_336320	Hydrogenosoma Hybrid-cluster protein , [6Fe-6S] Hydroxylamine reductase	56	1	Electron transport
TVAG_381290	Chaperone, Hsp20, alpha crystallin	52	0	Posttranslational modification; Protein turnover
TVAG_350540	Thioredoxin/tryparedoxin peroxidase	51	0	Antioxidant activity, Oxidoreductase activity
TVAG_474980	Thioredoxin reductase	51	6	Electron transporter activity
TVAG_161300	Iron superoxide dismutase	50	0	Superoxide dismutase activity; Metal ion binding

TVAG_239310	Actinin-Alpha	50	73	Proteolysis and peptidolysis ; Cell adhesion
TVAG_036010	Hydrogenosomal oxygen reductase	49	12	Protein biosynthesis
TVAG_075420	Thioredoxin/tryparedoxin peroxidase	48	1	Transport
TVAG_057000	PDase: cathepsin L-like cysteine peptidase	45	12	Proteolysis and peptidolysis
TVAG_165340	Adhesin protein AP33-3 (Succinyl-CoA ligase-alpha chain)	45	29	DNA binding; Catalytic activity
TVAG_237680	Hydrogenosomal membrane protein 31 precursor (HMP31)	45	8	Transport
TVAG_259190	Adhesin protein AP51-1 (Succinyl-CoA ligase-beta chain)	45	6	Energy production and conversion
TVAG_386080	PDase: aminopeptidase P-like metallopeptidase	43	0	Proteolysis and peptidolysis
TVAG_373720	Pyruvate kinase	42	5	Glycolysis
TVAG_074480	60S Ribosomal protein L10a	41	88	Protein biosynthesis
TVAG_340290	Adhesin protein AP65-1	41	60	Malate metabolism
TVAG_359090	Tubulin-alpha chain	41	22	Cytoskeleton
TVAG_298080	PDase: cathepsin L-like cysteine peptidase	39	99	Proteolysis and peptidolysis
TVAG_310250	Phosphoenol pyruvate carboxykinase	39	20	Gluconeogenesis
TVAG_360700	Fructose-1,6-bisphosphate aldolase	37	28	Glycolysis
TVAG_274830	60S Ribosomal protein L7Ae [pseudogene]	36	12	Protein biosynthesis
TVAG_206500	Hydrogenosoma Hybrid-cluster protein , [6Fe-6S] Hydroxylamine reductase	35	7	Electron transport
TVAG_351310	Fimbrin, actin filament bundling protein	34	9	Calcium ion binding
TVAG_047890	Adhesin protein AP33-2 (Succinyl CoA synthetase-2 alpha-subunit) gene	33	17	Catalytic activity
TVAG_228520	Malic enzyme	32	0	Malate metabolism
TVAG_209020	Phosphoglycerate mutase	30	8	Glycolysis
TVAG_467970	PDase: cathepsin L-like cysteine peptidase	29	20	Proteolysis and peptidolysis
TVAG_090100	PDase: cathepsin L-like cysteine peptidase	28	0	Proteolysis and peptidolysis
TVAG_348330	Glycogen phosphorylase	28	23	Carbohydrate metabolism
TVAG_038440	Fructose-1,6-bisphosphate aldolase	27	1	Glycolysis
TVAG_096350	Triosephosphate isomerase	27	29	Metabolism
TVAG_051160	60S Ribosomal protein L10	26	41	Protein biosynthesis
TVAG_383940	Phosphoglycerate kinase	26	42	Glycolysis
TVAG_196620	Lipid-binding START (STeroidogenic Acute Regulatory related lipid Transfer)	25	6	Carbohydrate metabolic process
TVAG_272910	Transaldolase A	24	3	Electron transport
TVAG_407250	zz-HYP: 94275.m00113	23	10	Function unkown

TVAG_056190	PDase: peptidase T-like metallopeptidase	22	6	Proteolysis
TVAG_145440	Thioredoxin-like (WCGPC-motif)	22	2	Electron transport
TVAG_437020	60S Ribosomal protein L10e, Cytochrome c heme-binding site	22	3	Protein biosynthesis
TVAG_008680	Tubulin-Beta chain	21	45	Microtubule-based movement
TVAG_148040	ADP-ribosylation factor, GTPase	21	6	Small GTPase mediated signal transduction
TVAG_055320	ISCS/NifU-like, (HesB/YadR/YfhF), Frataxin-like	20	1	Function unknown
TVAG_100620	Profilin (G-actin binding protein)	20	10	Actin binding
TVAG_192620	Cofilin, Actin depolymerizing factor	20	2	Actin binding
TVAG_432650	ISCS/NifU-like domain, Iron sulfur cluster assembly protein	20	0	Function unknown
TVAG_492250	Profilin (G-actin binding protein)	20	13	DNA binding
TVAG_202090	PDase: cathepsin L-like cysteine peptidase	19	3	Proteolysis and peptidolysis
TVAG_300000	Fructose-1,6-bisphosphate aldolase	19	26	Glycolysis
TVAG_455310	Thioredoxin/tryparedoxin peroxidase	19	0	Antioxidant activity, oxidoreductase activity
TVAG_009460	Malic enzyme	18	4	Malate metabolism; electron transport
TVAG_144730	Adhesin protein AP51-2 (Succinyl-CoA ligase-beta chain)	18	17	Catalytic activity
TVAG_153560	Chaperone, Hsp90	18	12	Protein folding
TVAG_185160	60S Ribosomal protein L19-3	18	10	Protein biosynthesis
TVAG_205910	Phosphoglucomutase	18	27	Carbohydrate metabolism
TVAG_238830	Hydrogenosomal malic enzyme subunit B proprotein (maeB) (AP65-1)	18	59	Malate metabolism
TVAG_296170	60S Ribosomal protein L22	18	9	Protein biosynthesis
TVAG_352580	40S Ribosomal protein S19e	18	5	Protein biosynthesis
TVAG_191250	zz-HYP: 86633.m00131	17	0	Function unkown
TVAG_324980	Vacuolar ATP synthase subunit B isoform 1	17	18	Function unkown
TVAG_380910	Eukaryotic translation initiation factor 4A (eIF4A)	17	17	Nucleic acid binding
TVAG_426660	PDase: asparaginyl endopeptidase-like cysteine peptidase, legumain family	17	17	Proteolysis and peptidolysis
TVAG_484180	60S Ribosomal protein L8	17	15	Protein biosynthesis
TVAG_006250	40S Ribosomal protein S15a	16	4	Protein biosynthesis
TVAG_054130	60S Ribosomal protein L7-2	16	17	Protein biosynthesis
TVAG_087140	Actin-related protein complex, subunit p34-Arc	16	9	Cytoskeleton
TVAG_159830	40S Ribosomal protein S23	16	5	Protein biosynthesis
TVAG_405900	Phosphoglucomutase	16	0	Carbohydrate metabolism

TVAG_410350	Osmotically inducible protein C	16	6	Catalytic activity
TVAG_043070	Fructose-1,6-bisphosphate aldolase	15	7	Glycolysis
TVAG_110890	60S Ribosomal protein L16	15	3	Protein biosynthesis
TVAG_148950	60S Ribosomal protein L15-1	15	10	Protein biosynthesis
TVAG_157940	GH77, 4-alpha-glucanotransferase (Amylomaltase)	15	10	Carbohydrate metabolism
TVAG_163210	40S Ribosomal protein S5	15	14	Protein biosynthesis
TVAG_370550	40S Ribosomal protein S6e	15	12	Protein biosynthesis
TVAG_094730	60S Ribosomal protein L34e	14	6	Protein biosynthesis
TVAG_098450	40S Ribosomal protein S4-C	14	17	Protein biosynthesis
TVAG_345450	60S Ribosomal protein L23	14	6	Protein biosynthesis
TVAG_479540	Phosphoenol pyruvate carboxykinase	14	58	Gluconeogenesis

^a The number of ESTs in the lane TvF and TvE represents transcripts per 10000 clones

^b Function classifications of the annotated ESTs are based on GO categories