

Table S2. Transcripts that are induced >2-fold in *Toxoplasma* grown in alkaline medium

Accession no.	Fold	Predicted function
Adhesion & Invasion		
162.m00311	6.94	SRS domain-containing protein
583.m05680	5.62	SRS domain-containing surface antigen, putative
63.m00337	4.16	SRS47E
162.m00313	3.75	GPI-anchored surface antigen, putative
59.m03665	3.52	SRS domain-containing surface antigen, putative
25.m01768	3.50	kinesin motor domain-containing protein
25.m00004	3.08	SAG2 related antigen SAG2B
55.m04865	2.56	microneme protein, putative
64.m00327	2.37	membrane skeletal protein IMC1-related
641.m01566	2.29	GPI-anchored surface antigen, putative
52.m01567	2.24	cell wall protein-related
49.m03223	2.12	myosin light chain kinase, putative
Metabolism		
44.m02535	77.19	haloacid dehalogenase-like hydrolase domain containing protein
541.m01207	5.33	dihydrolipoamid dehydrogenase, putative
50.m00029	4.06	1,4-alpha-glucan branching enzyme, putative
542.m00223	3.74	thymidylate kinase, putative
44.m00012	3.94	3-oxoacyl-synthase, putative / acyl-carrier-protein, putative
41.m01331	3.68	phosphoglycerate kinase, putative
83.m00003	3.51	ribonucleoside-diphosphate reductase, large subunit, putative
541.m01237	3.29	oxidoreductase, putative
59.m03618	3.14	transketolase, putative
76.m01567	3.10	pyruvate carboxylase, putative
49.m03154	3.00	serine:pyruvate/alanine:glyoxylate aminotransferase, putative
50.m03138	2.86	acylamino-acid-releasing enzyme, putative
44.m02770	2.85	deoxyuridine 5'-triphosphate nucleotidohydrolase, putative
41.m00032	2.82	aldehyde dehydrogenase, putative
641.m00168	2.67	malate dehydrogenase, putative
46.m01716	2.49	haloacid dehalogenase-like hydrolase domain-containing protein
551.m00229	2.44	6-phosphogluconate dehydrogenase, putative
80.m00049	2.42	opine dehydrogenase, putative
57.m01793	2.41	lysine decarboxylase domain-containing protein
57.m00028	2.34	isocitrate dehydrogenase, putative
44.m02574	2.30	acetyltransferase domain-containing protein
57.m01784	2.29	glycosyltransferase sugar-binding region containing DXD motif
55.m05019	2.29	NADH-cytochrome B5 reductase, putative
59.m03723	2.12	thiF family domain-containing protein
59.m03459	2.11	biotin carboxyl carrier protein, putative
583.m05389	2.10	apyrase, putative
50.m00016	2.05	dihydrofolate reductase-thymidylate synthase
49.m03432	2.03	glucoamylase S1/S2 precursor-related
551.m00022	2.03	ATP-binding protein-related
49.m05731	2.01	UDP-N-acetylglucosamine-1-phosphate transferase, putative
55.m00168	2.01	ATP synthase beta chain, putative
Protein translation and processing		
59.m07783	3.58	cysteine protease domain containing protein
55.m04698	2.95	prefoldin subunit 3, putative
50.m03182	2.92	glutaredoxin-related domain-containing protein
59.m03538	2.75	poly [ADP-ribose] polymerase-1, putative
583.m05330	2.60	PEANUT1
76.m01670	2.44	peroxiredoxin family protein/glutaredoxin, putative
583.m09175	2.38	proteasome subunit beta type 3, putative
49.m05715	2.34	OTU-like cysteine protease domain-containing protein
83.m01219	2.06	poly(ADP)-ribose polymerase-related
38.m00013	2.06	histidyl tRNA synthetase 2
55.m05059	2.05	ubiquitin carboxyl-terminal hydrolase, putative
641.m00192	2.02	TCP-1/cpn60 family chaperonin, putative
52.m00007	2.01	proteasome subunit beta type 2, putative

39.m00356	2.00	lysyl-tRNA synthetase-related
Signaling and gene expression		
20.m03817	5.35	AP2 protein
46.m01736	3.71	replication factor C small subunit, putative
65.m01169	3.64	D4 dopamine receptor-related
52.m01667	3.57	protein kinase-related
39.m00361	3.45	3'5'-cyclic nucleotide phosphodiesterase, putative
113.m00762	3.41	MORN repeat-containing protein
641.m00011	3.14	proliferating cell nuclear antigen 2, putative
641.m01483	3.02	AP2 protein
49.m00049	2.96	DNA replication licensing factor, putative
50.m03076	2.86	origin recognition complex subunit 2-related
20.m00342	2.82	replication factor A-related protein, putative
38.m01060	2.69	cyclin-dependent kinase-related
42.m00103	2.67	DNA-binding protein HU, putative
38.m01077	2.53	DNA replication licensing factor, putative
49.m05649	2.52	bolA-like protein-related
80.m02294	2.42	NUDIX domain-containing protein
50.m03192	2.40	ATPase 2, putative
46.m01743	2.25	protein kinase-related
59.m03392	2.24	DNA polymerase alpha subunit-related
50.m00018	2.23	adenosine kinase
50.m03356	2.22	caltractin (centrin), putative
35.m00895	2.18	EF hand domain-containing protein
44.m02816	2.17	DNA polymerase delta small subunit, putative
59.m03702	2.16	TGF-beta resistance-associated protein-related
55.m04912	2.16	DNA mismatch repair protein, putative
55.m04926	2.16	histone H2A, putative
49.m03276	2.13	protein kinase domain-containing protein
20.m03683	2.12	TPR domain-containing protein
59.m03368	2.11	phosphoinositide-dependent protein kinase, putative
49.m03212	2.10	maf-like protein, putative
52.m01606	2.05	importin-alpha re-exporter, putative
52.m01539	2.04	DNA polymerase epsilon p17 subunit, putative
Transport		
50.m00011	3.62	enoyl-acyl carrier reductase
113.m00769	3.38	membrane transporter PFB0465c
80.m00077	2.84	cation-transporting ATPase, putative
55.m08201	2.38	vacuolar protein sorting 26, putative
55.m00019	2.29	acyl carrier protein
49.m03236	2.23	L-type amino acid transporter-related
25.m01818	2.21	mitochondrial carrier domain-containing protein
541.m01185	2.19	ABC transporter, putative
26.m00235	2.09	lava lamp protein-related / peripheral golgi protein-related
52.m01549	2.04	vacuolar protein sorting 29, putative
641.m01548	2.04	L-type amino acid transporter-related
44.m02594	2.01	calcium-transporting ATPase, putative
50.m05656	2.01	mitochondrial carrier domain-containing protein

See Table S5 for list of hypothetical genes (49 of 75 not up-regulated in Δ GCN5-A)

Entries in **bold** are not up-regulated in parasites lacking TgGCN5-A. Genes with $p < 0.001$ are displayed.