

Table S2A: Functional clarification of top 100 genes in *Toxoplasma gondii* with the highest levels of expression in the oocysts sporulated for 10 days

Functional group	Gene count
Antigen and/or secretory protein	18
beta antigen (1)	
GRA (6)	
MIC (7)	
SRS (4)	
Enzyme	10
AA synthesis (1)	
energy (2)	
glycosylases (1)	
protein modification (3)	
undefined (3)	
Chromatin (Histone)	3
Cytoskeletal	3
Redox homeostasis	3
Ribosomal proteins	3
Chaperonin (HSP)	2
Gene expression (TIF)	2
Protein degradation (ubiquitin)	2
Calcium-binding (CaM)	1
Structure (COWP)	1
Hypothetical	52
Grand Total	100

Figure S2B. List of the top 100 highly expressed genes in the *Toxoplasma gondii* oocysts sporulated for 10 days. Original data were generated by Fritz et al. (2012) and extracted from <http://www.ToxoDB.org>.

Rank	Gene ID	Level (d10 oocysts)	Product Description	Functional group	Subgroup
1	TGME49_081590	13.7009755	hypothetical protein	hypothetical	hypothetical
2	TGME49_070250	13.616716	dense granule protein 1 / major antigenp24	antigen	GRA
3	TGME49_037080	13.3381775	hypothetical protein	hypothetical	hypothetical
4	TGME49_093690	13.2964225	profilin family protein	cytoskeletal	profilin
5	TGME49_120530	13.1842575	hypothetical protein	hypothetical	hypothetical
6	TGME49_086450	13.181792	dense granule protein 5 precursor	antigen	GRA
7	TGME49_050710	13.149738	microneme protein 10	antigen	MIC
8	TGME49_002100	13.106612	hypothetical protein	hypothetical	hypothetical
9	TGME49_058550	13.0106595	SRS28 (= SporoSAG)	antigen	SRS
10	TGME49_076850	12.9646045	late embryogenesis abundant domain-containing protein	hypothetical	hypothetical
11	TGME49_014220	12.9475755	hypothetical protein	hypothetical	hypothetical
12	TGME49_020400	12.908191	actin depolymerizing factor	cytoskeletal	actin
13	TGME49_059900	12.903928	hypothetical protein, conserved	hypothetical	hypothetical
14	TGME49_002110	12.854348	hypothetical protein	hypothetical	hypothetical
15	TGME49_119890	12.849931	hypothetical protein	hypothetical	hypothetical
16	TGME49_094600	12.7870565	hypothetical protein	hypothetical	hypothetical
17	TGME49_120540	12.760554	hypothetical protein	hypothetical	hypothetical
18	TGME49_013280	12.7605255	hypothetical protein	hypothetical	hypothetical
19	TGME49_003310	12.749144	dense granule protein 7	antigen	GRA
20	TGME49_027100	12.748301	glutaredoxin, putative	Redox homeostasis	redoxin
21	TGME49_116190	12.738828	superoxide dismutase, putative	Redox homeostasis	SOD
22	TGME49_076880	12.6711495	late embryogenesis abundant domain-containing protein	hypothetical	hypothetical
23	TGME49_108840	12.6364755	SRS51 (= SRS3)	antigen	SRS
24	TGME49_004520	12.586474	hypothetical protein	hypothetical	hypothetical
25	TGME49_087250	12.5827725	hypothetical protein	hypothetical	hypothetical
26	TGME49_008450	12.546591	serine proteinase inhibitor, putative	enzyme	protein modification
27	TGME49_003720	12.5409265	vitamin K epoxide reductase complex subunit 1, putative	enzyme	unknown
28	TGME49_106270	12.4310705	hypothetical protein	hypothetical	hypothetical
29	TGME49_000360	12.430844	hypothetical protein	hypothetical	hypothetical
30	TGME49_108020	12.3837425	SRS57 (= SAG3, P43)	antigen	SRS
31	TGME49_004530	12.36251	microneme protein MIC11	antigen	MIC
32	TGME49_119560	12.3558365	microneme protein MIC3	antigen	MIC
33	TGME49_066860	12.3482205	BTB/POZ domain-containing protein	hypothetical	hypothetical
34	TGME49_088650	12.3452855	hypothetical protein	hypothetical	hypothetical
35	TGME49_070950	12.3446345	hypothetical protein	hypothetical	hypothetical
36	TGME49_019820	12.3179475	polyubiquitin, putative	protein degradation	ubiquitin
37	TGME49_053820	12.2409775	hypothetical protein, conserved	hypothetical	hypothetical
38	TGME49_067470	12.209846	hypothetical protein	hypothetical	hypothetical
39	TGME49_009610	12.1808045	oocyst wall protein COWP, putative	structure	COWP
40	TGME49_049370	12.1675755	translation initiation factor SUI1, putative	gene expression	TIF
41	TGME49_058470	12.136311	hypothetical protein	hypothetical	hypothetical
42	TGME49_089690	12.115494	glyceraldehyde-3-phosphate dehydrogenase	enzyme	energy
43	TGME49_093740	12.020502	hypothetical protein	hypothetical	hypothetical
44	TGME49_009910	11.995331	histone H2B variant 1	chromatin	histone
45	TGME49_039740	11.968661	hypothetical protein	hypothetical	hypothetical
46	TGME49_057380	11.9351895	hypothetical protein	hypothetical	hypothetical
47	TGME49_053690	11.8690545	hypothetical protein	hypothetical	hypothetical
48	TGME49_017890	11.8021	peroxiredoxin	Redox homeostasis	redoxin
49	TGME49_071930	11.798724	hypothetical protein, conserved	hypothetical	hypothetical
50	TGME49_060190	11.7461065	microneme protein, putative	antigen	MIC

51	TGME49_049240	11.70397 calmodulin	Calcium-binding	CaM
52	TGME49_075810	11.66303 ribosomal protein S10, putative	ribosome biogenesis	ribosomal protein
53	TGME49_080430	11.65981 hypothetical protein	hypothetical	hypothetical
54	TGME49_071490	11.649778 hypothetical protein	hypothetical	hypothetical
55	TGME49_086090	11.6027615 translation initiation factor SUI1, putative	gene expression	TIF
56	TGME49_091890	11.596418 microneme protein MIC1	antigen	MIC
57	TGME49_032940	11.5887815 small heat shock protein 20	Chaperonin	HSP
58	TGME49_115260	11.5792415 alanine dehydrogenase, putative	enzyme	AA synthesis
59	TGME49_076860	11.5683955 late embryogenesis abundant domain-containing protein	hypothetical	hypothetical
60	TGME49_112940	11.5603165 hypothetical protein	hypothetical	hypothetical
61	TGME49_031080	11.5151295 hypothetical protein	hypothetical	hypothetical
62	TGME49_005090	11.497294 hypothetical protein	hypothetical	hypothetical
63	TGME49_027620	11.496448 28 kDa antigen	antigen	GRA
64	TGME49_055660	11.487851 hypothetical protein	hypothetical	hypothetical
65	TGME49_066460	11.473115 ubiquitin-like protein SMT3 precursor, putative	protein degradation	ubiquitin
66	TGME49_018260	11.471261 histone H3.3 variant	chromatin	Histone
67	TGME49_002090	11.449114 hypothetical protein	hypothetical	hypothetical
68	TGME49_059630	11.41997 hypothetical protein, conserved	hypothetical	hypothetical
69	TGME49_032410	11.4188375 hypothetical protein	hypothetical	hypothetical
70	TGME49_014940	11.410756 MIC2-associated protein M2AP	antigen	MIC
71	TGME49_089600	11.4105075 Hsp20/alpha crystallin domain-containing protein	Chaperonin	HSP
72	TGME49_013940	11.3763095 CHCH domain-containing protein	hypothetical	hypothetical
73	TGME49_077080	11.3529265 microneme TgMIC5 protein	antigen	MIC
74	TGME49_072240	11.345837 hypothetical protein	hypothetical	hypothetical
75	TGME49_062470	11.3437315 beta antigen, putative	antigen	beta antigen
76	TGME49_109810	11.331183 60S acidic ribosomal protein P2, putative	ribosome biogenesis	ribosomal protein
77	TGME49_001860	11.283525 hypothetical protein	hypothetical	hypothetical
78	TGME49_029320	11.2675365 haloacid dehalogenase-like hydrolase domain-containing protein	enzyme	unknown
79	TGME49_029330	11.2512265 haloacid dehalogenase-like hydrolase domain containing protein	enzyme	unknown
80	TGME49_034550	11.2503755 60S ribosomal protein L29, putative	ribosome biogenesis	ribosomal protein
81	TGME49_036040	11.218365 fructose-1,6-bisphosphate aldolase	enzyme	energy
82	TGME49_046130	11.1989775 serine protease inhibitor, putative	enzyme	protein modification
83	TGME49_033460	11.163425 SRS29B (= SAG1, P30)	antigen	SRS
84	TGME49_024130	11.1455005 hypothetical protein	hypothetical	hypothetical
85	TGME49_013850	11.137022 hypothetical protein	hypothetical	hypothetical
86	TGME49_080380	11.1196235 non-transmembrane antigen	enzyme	Glycosylases
87	TGME49_026020	11.113592 transmembrane domain-containing protein	hypothetical	hypothetical
88	TGME49_026500	11.1130655 hypothetical protein	hypothetical	hypothetical
89	TGME49_046550	11.094218 eukaryotic aspartyl protease, putative	enzyme	protein modification
90	TGME49_016180	11.0912385 hypothetical protein	hypothetical	hypothetical
91	TGME49_054800	11.0320385 hypothetical protein	hypothetical	hypothetical
92	TGME49_116400	11.0203125 tubulin alpha chain	cytoskeletal	tubulin
93	TGME49_039260	11.020137 histone H4, putative	chromatin	histone
94	TGME49_075440	11.0162525 granule antigen protein GRA6	antigen	GRA
95	TGME49_048990	10.971121 hypothetical protein	hypothetical	hypothetical
96	TGME49_092350	10.970051 hypothetical protein	hypothetical	hypothetical
97	TGME49_055380	10.9643055 hypothetical protein	hypothetical	hypothetical
98	TGME49_116710	10.9216445 hypothetical protein	hypothetical	hypothetical
99	TGME49_054720	10.9094295 dense granule protein GRA8	antigen	GRA
100	TGME49_058410	10.895404 hypothetical protein	hypothetical	hypothetical