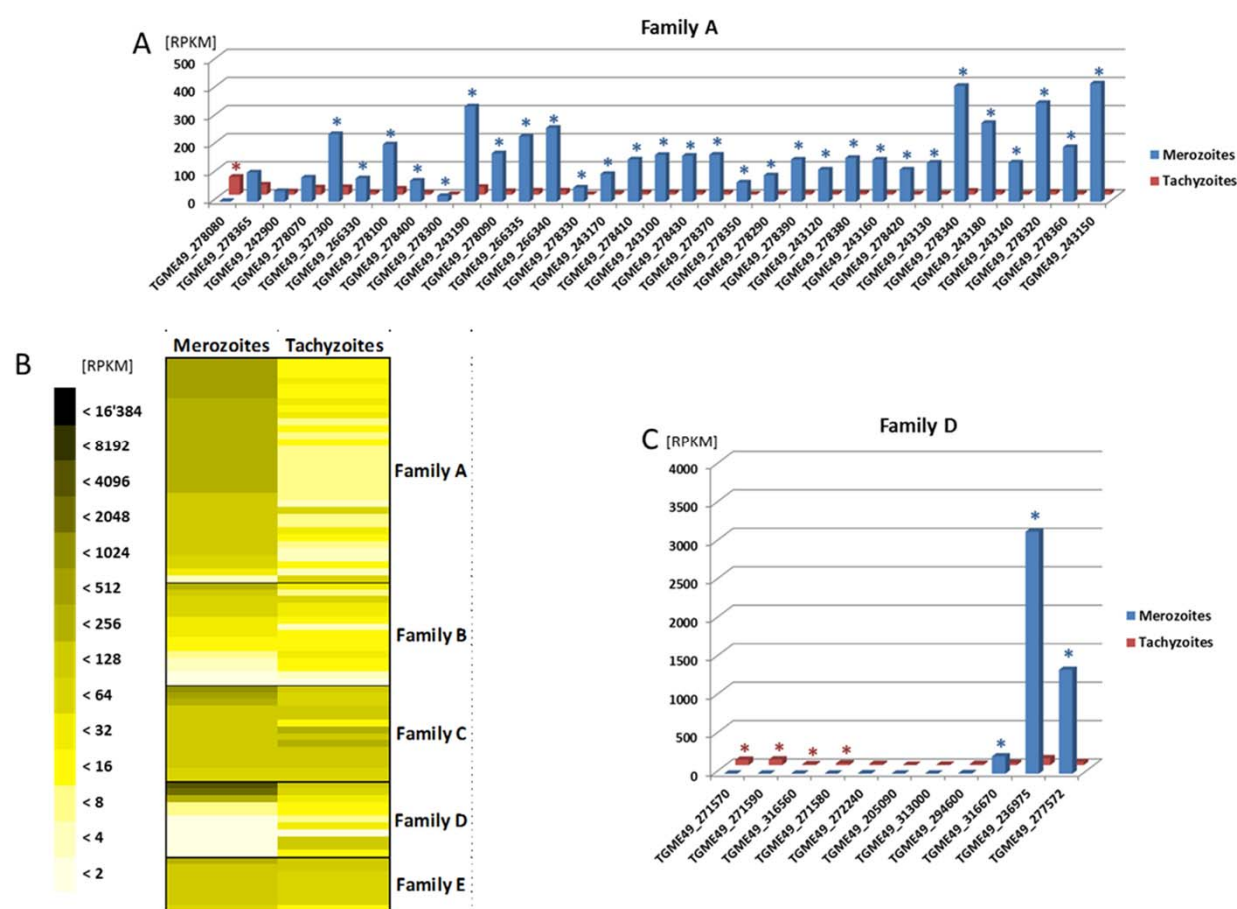


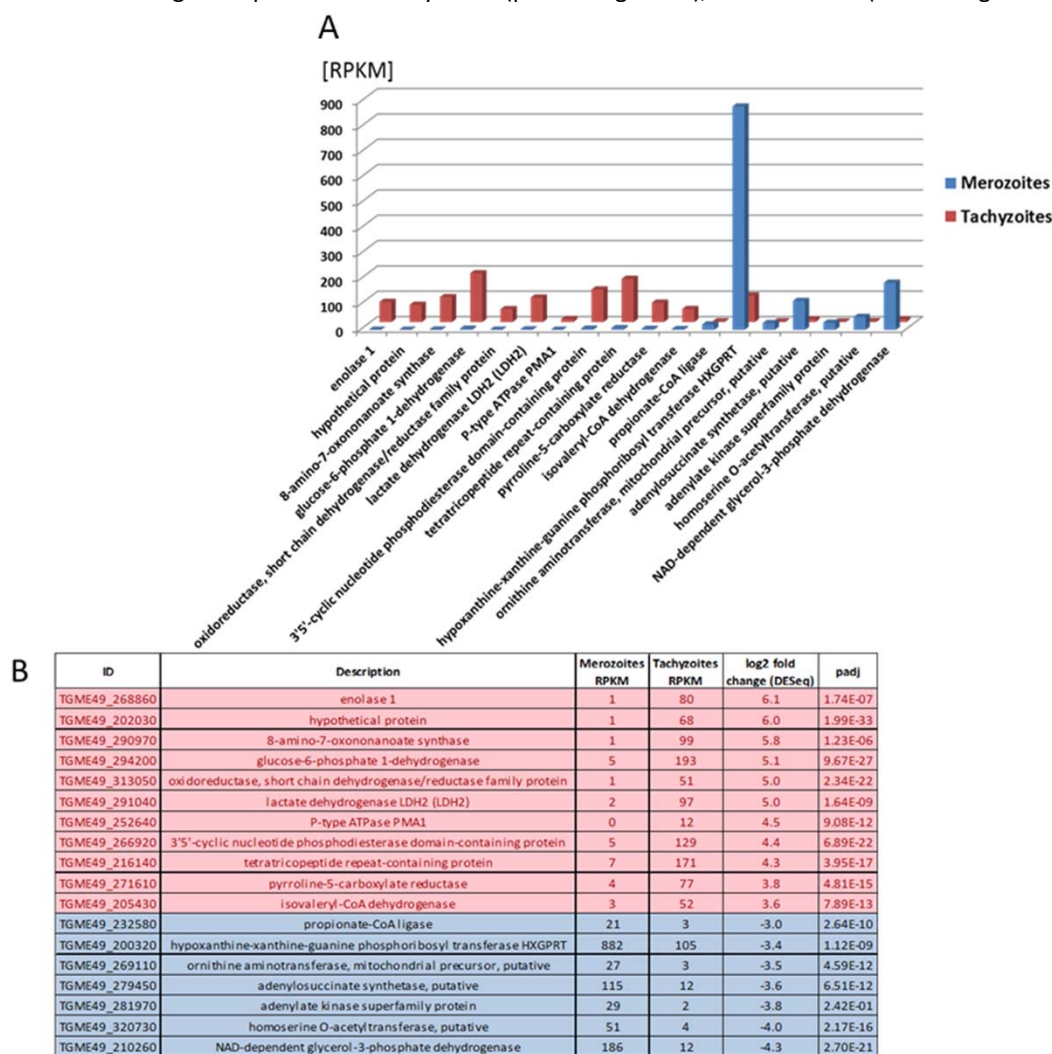
Additional file 2: Figure S1

Differential expression of – *T. gondii* Family A-E genes. (A) Bar graph of Family A gene expression. (B) Heat map showing levels of expression for members of all five families (RPKM). (C) Bar graph of Family D gene expression. Differentially expressed genes (>log2 [3]) are indicated with asterisks.



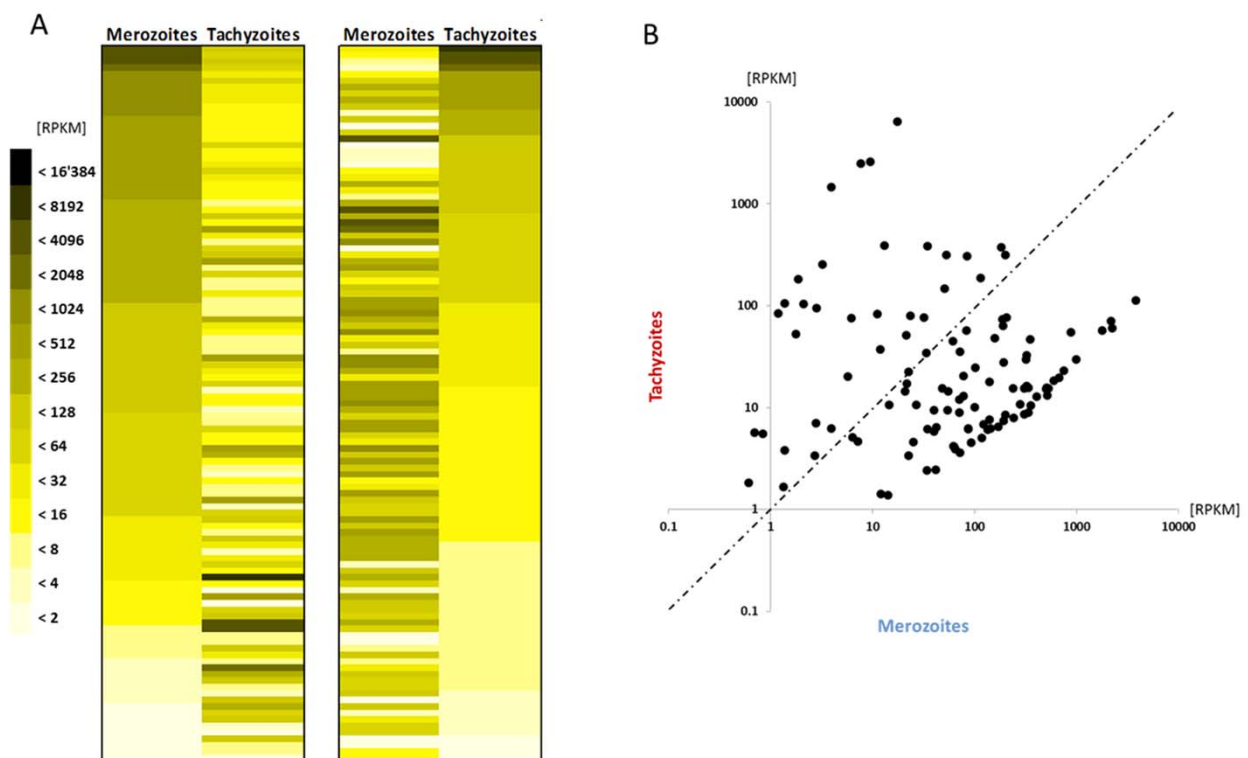
Additional file 2: Figure S2

Differential expression of metabolic genes. Significantly regulated genes contained in the iCS382 list used for constructing the metabolic model for *Toxoplasma*. (A) Bar graph showing RPKM values only for the 18 metabolic genes whose differences in expression was $>\log_2[3]$. (B) Corresponding detailed list of regulated metabolic genes including adjusted p-values. Higher expression in tachyzoites (pink background), in merozoites (blue background).



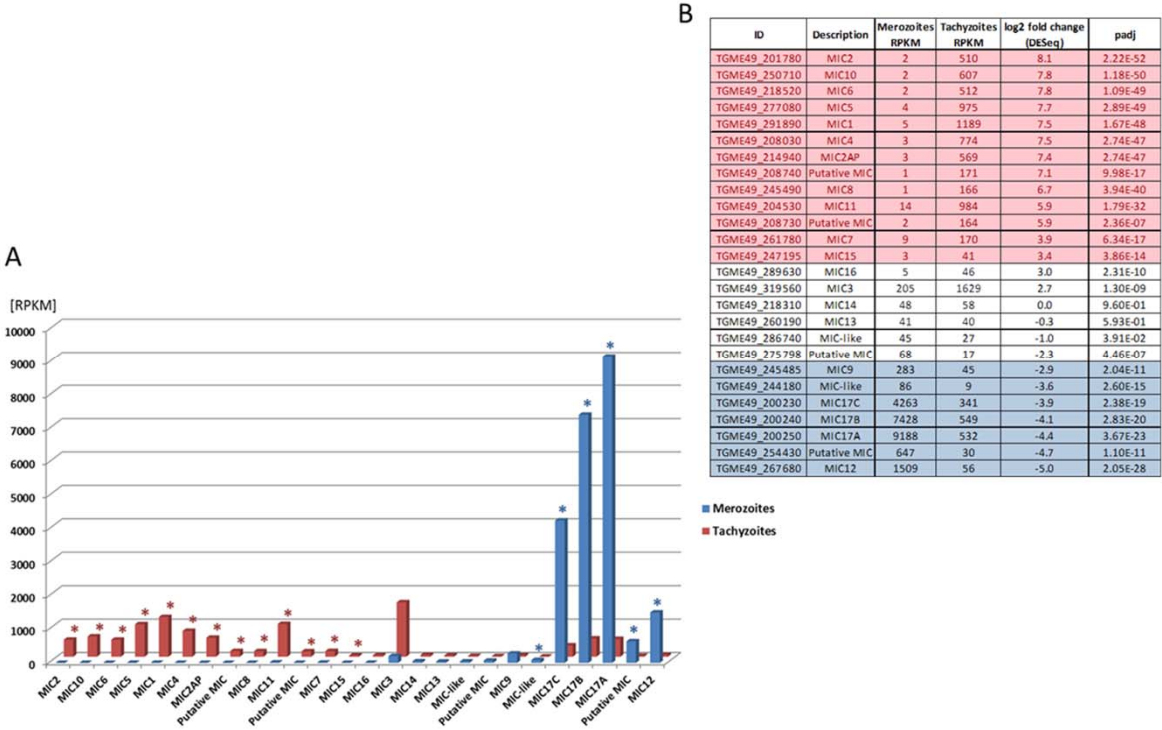
Additional file 2: Figure S3

Differential expression of *SRS* genes. (A) Heat maps with color-coded RPKM values. Left side: ordered for descending RPKMs in merozoites. Right side: ordered for descending RPKMs in tachyzoites. (B) Scatter plot of RPKM values for all 111 annotated *SRS*s.



Additional file 2: Figure S4

Differential expression of microneme (*MIC*) genes annotated in ToxoDB. (A) Bar graph showing RPKM values for all *MIC*s (differentially expressed genes ($>\log_2 [3]$) are indicated with asterisks). (B) Corresponding detailed list of *MIC* genes including adjusted p-values. Higher expression in tachyzoites (pink background), in merozoites (blue background).



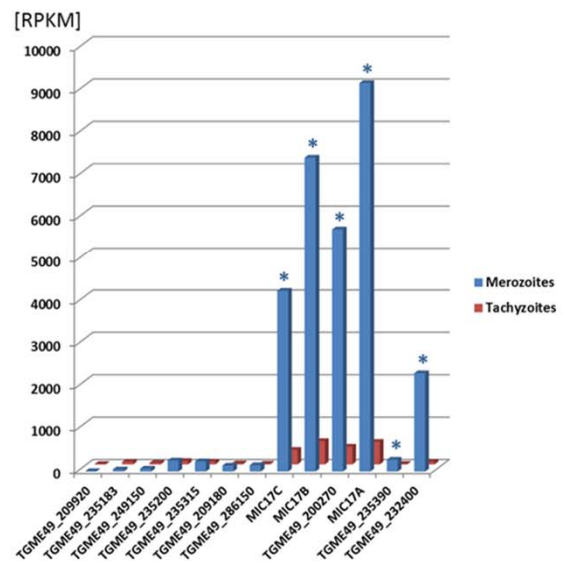
Additional file 2: Figure S5

Differential expression of genes coding for PAN-domain containing proteins. (A) List representation of 13 genes ordered by increasing stage-specificity of expression. Genes with a significantly higher expression ($>\log_2 [3]$) in merozoites are highlighted with blue. (B) Bar graph of RPKM values for all PAN-domain genes. Asterisk: $>\log_2 [3]$ difference in expression in merozoites.

A

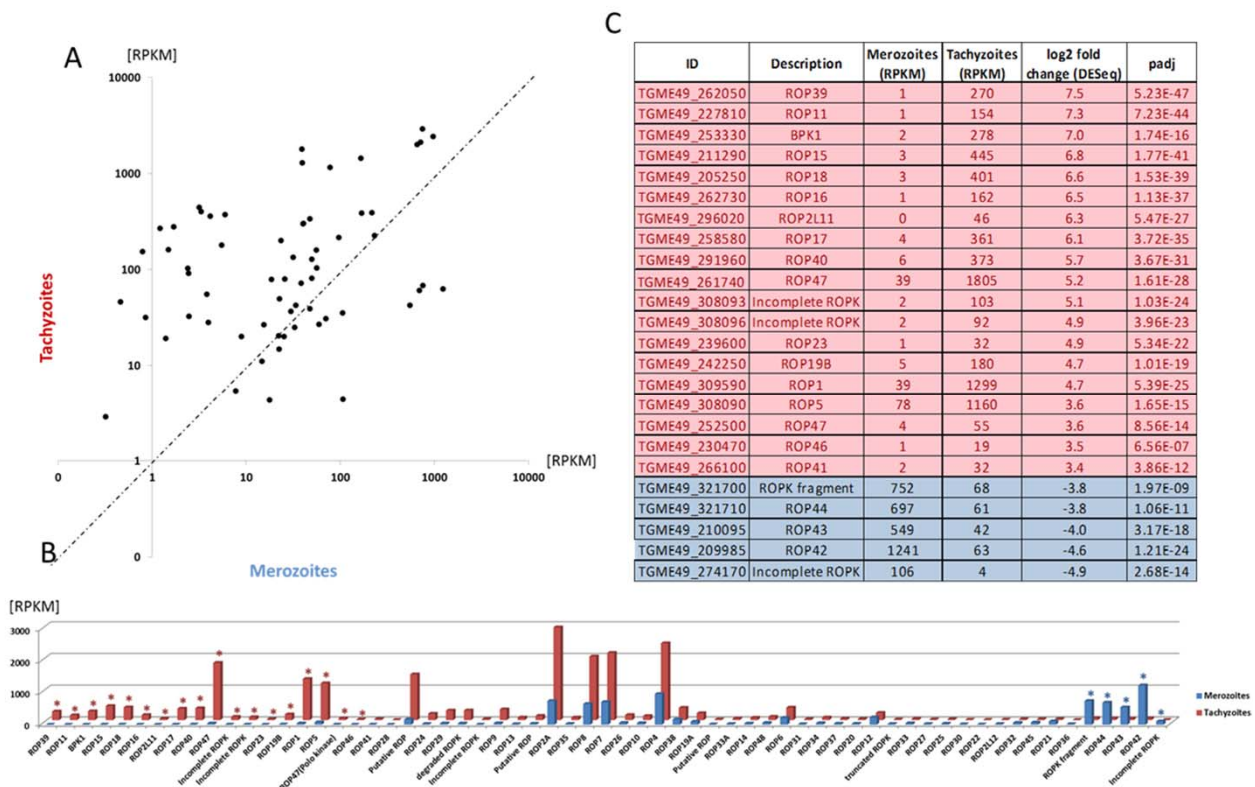
Description	ID	Merozoites RPKM	Tachyzoites RPKM	log2 fold change (DESeq)	padj
PAN domain-containing protein	TGME49_209920	7	8	0.0	1.00E+00
PAN domain-containing protein	TGME49_235183	48	60	0.0	9.44E-01
PAN domain-containing protein	TGME49_249150	68	36	-1.2	4.01E-01
PAN domain-containing protein	TGME49_235200	258	80	-2.0	1.78E-04
PAN domain-containing protein	TGME49_235315	239	66	-2.2	6.61E-05
PAN domain-containing protein	TGME49_209180	139	24	-2.8	5.15E-09
PAN/Apple domain-containing protein	TGME49_286150	150	16	-3.5	4.28E-09
microneme protein MIC17C	TGME49_200230	4263	341	-3.9	2.38E-19
microneme protein MIC17B	TGME49_200240	7428	549	-4.1	2.83E-20
PAN/Apple domain-containing protein	TGME49_200270	5730	418	-4.1	1.50E-14
microneme protein MIC17A	TGME49_200250	9188	532	-4.4	3.67E-23
PAN domain-containing protein	TGME49_235390	277	13	-4.7	2.57E-12
PAN domain-containing protein	TGME49_232400	2318	64	-5.5	5.35E-32

B



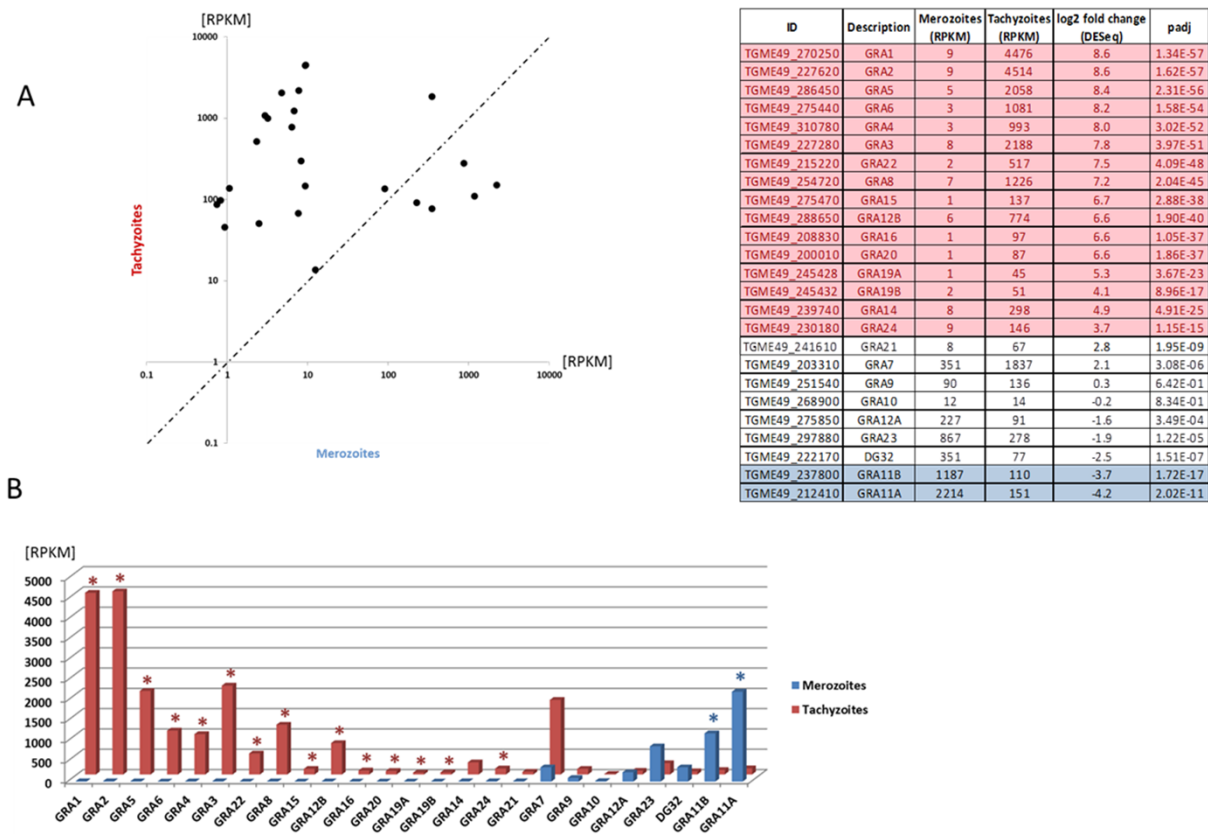
Additional file 2: Figure S6

Differential expression of annotated rhoptry (*ROP*) genes. (A) Scatter plot of RPKM values for all annotated genes (see also Additional file 2: Table S4). (B) Bar graph of RPKM values for all *ROP* genes. Asterisk: $>\log_2 [3]$ difference in expression. Y-axis: RPKM values. (C) List of differentially expressed genes only. Higher expression in tachyzoites (pink background), in merozoites (blue background).



Additional file 2: Figure S7

Differential expression of annotated dense granule (*GRA*) genes. (A) Scatter plot of RPKM values for all genes. (B) Bar graph of RPKM values for all *GRA* genes. Asterisk: $>\log_2 [3]$ difference in expression. (C) List of all annotated *GRAs*: higher expression in tachyzoites (pink background), in merozoites (blue background).



Additional file 2: Figure S8

Differential regulation of TgAP2 genes. (A) Stage-specific expression of TgAP2 genes. (B) Bar graph depicting percent expression of individual TgAP2 mRNAs in merozoites or tachyzoites ordered by –fold difference in expression starting with the *AP2XII1* and *AP2VIIA2* (TGME49_218960, TGME49_280460) with strongly tachyzoite-specific expression. *AP2VIIA1* was the only family member expressed >8-fold higher in merozoites. Asterisks: RPKM differences >8-fold.

A

ID	Description	Merozoites (RPKM)	Tachyzoites (RPKM)	log2 fold change (DESeq)	padj	Heatmap
TGME49_218960	AP2 domain transcription factor AP2XII-1 (AP2XII1)	3	45	3.4	3.30E-14	
TGME49_280460	AP2 domain transcription factor AP2VIIa-2 (AP2VIIA2)	7	75	3.1	1.90E-11	
TGME49_215340	AP2 domain transcription factor AP2X-10 (AP2X10)	13	102	2.7	4.15E-09	
TGME49_215380	AP2 domain transcription factor AP2II-2 (AP2II2)	3	28	2.7	4.92E-09	
TGME49_211720	AP2 domain transcription factor AP2VI-5 (AP2VI5)	6	46	2.6	1.42E-08	
TGME49_205630	AP2 domain transcription factor AP2VIIa-3 (AP2VIIA3)	16	83	2.1	4.09E-06	
TGME49_269010	AP2 domain transcription factor AP2VII-7 (AP2VII7)	14	71	2.0	7.01E-06	
TGME49_252370	AP2 domain transcription factor AP2II-1 (AP2II1)	3	17	2.0	3.56E-05	
TGME49_272030	AP2 domain transcription factor AP2VI-6 (AP2VI6)	8	35	1.9	4.92E-05	
54 other AP2 genes						
TGME49_313810	AP2 domain transcription factor AP2VI-3 (AP2VI3)	30	16	-1.9	2.10E-05	
TGME49_267480	AP2 domain transcription factor AP2X-1 (AP2X1)	38	9	-2.4	6.90E-06	
TGME49_234030	AP2 domain transcription factor AP2X-3 (AP2X3)	21	4	-2.9	1.24E-10	
TGME49_280470	AP2 domain transcription factor AP2VIIa-1 (AP2VIIA1)	89	11	-3.0	8.91E-12	

B

