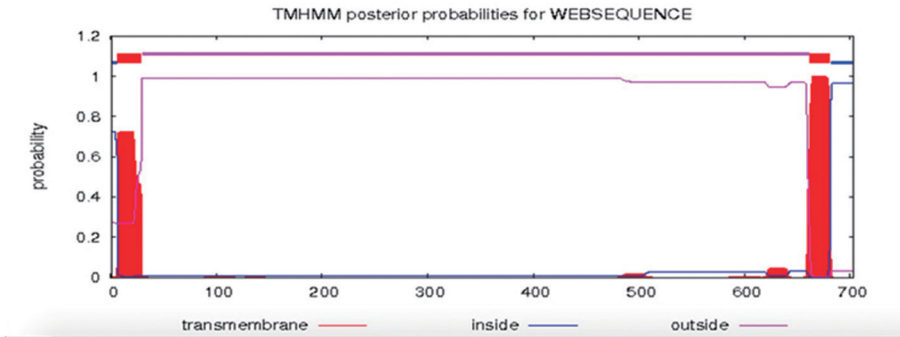


A

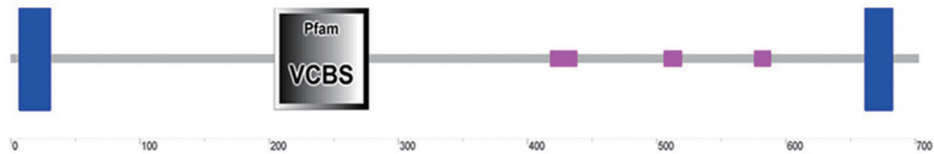
### TMHMM result

[HELP](#) with output formats

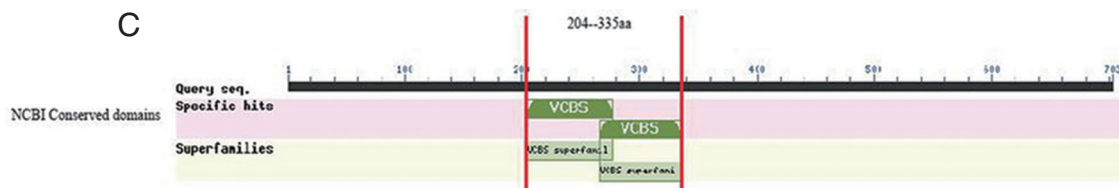
```
# WEBSEQUENCE Length: 703
# WEBSEQUENCE Number of predicted TMHs: 2
# WEBSEQUENCE Exp number of AAs in TMHs: 37.60775
# WEBSEQUENCE Exp number, first 60 AAs: 15.30522
# WEBSEQUENCE Total prob of N-in: 0.72761
# WEBSEQUENCE POSSIBLE N-term signal sequence
WEBSEQUENCE TMHMM2.0 inside 1 6
WEBSEQUENCE TMHMM2.0 TMhelix 7 29
WEBSEQUENCE TMHMM2.0 outside 30 661
WEBSEQUENCE TMHMM2.0 TMhelix 662 681
WEBSEQUENCE TMHMM2.0 inside 682 703
```



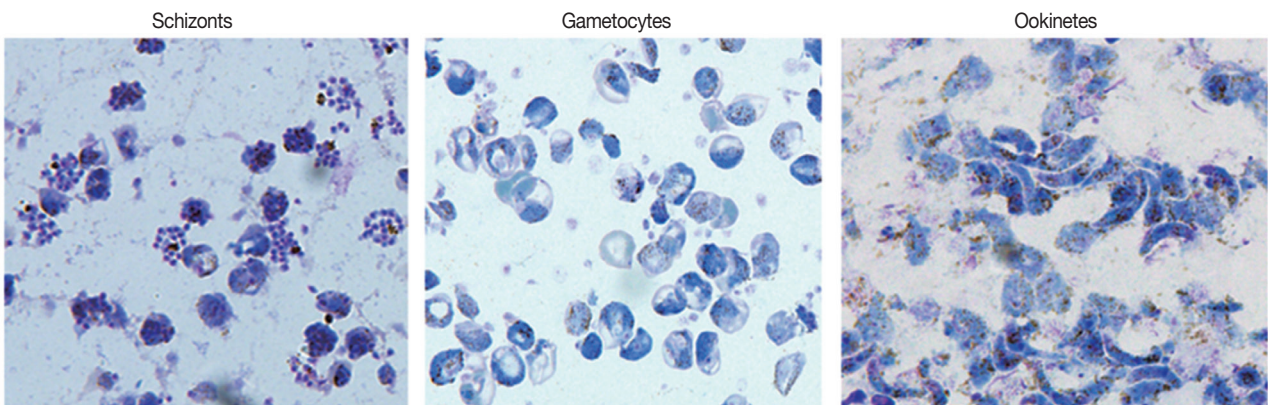
B



C



**Supplementary Fig. S1.** Identification of expressed segments of PbTIP. (A) PbTIP protein was screened in TMHMM online sever. (B) The results showed VCBS field from 204-277 AA using SMART online server. (C) VCBS field are mined in NCBI database, corresponding to 204-335 AA.



**Supplementary Fig. S2.** The extraction and purification of schizonts, gametocytes and ookinetes from *P. berghei* ANKA.