

Var family expression by upstream promoter classification

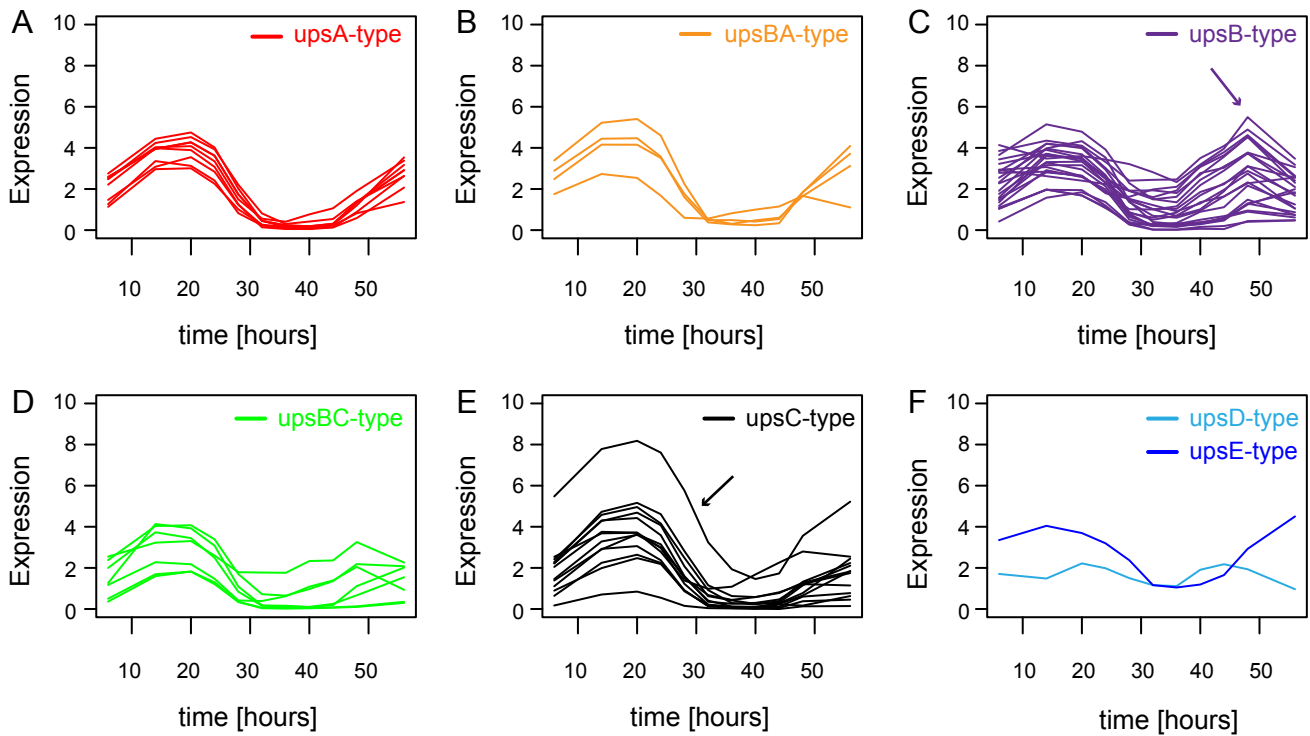


Figure S24. A central upsC-type var gene is the dominant var transcript, and subtelomeric upsB-type var genes produce the most non-coding transcripts. (A/B/C/D/E/F) Expression during the 56-hour time course of upsA-type (red), upsBA-type (orange), upsB-type (purple), upsBC-type (green), upsC-type (black), upsD-type (light blue) and upsE-type (dark blue) var genes, respectively [1]. This analysis indicated that an upsC-type gene, *Pf3D7_0412700*, was the dominant var transcript in the parasite population (black arrow). We also noted that the transcription of non-coding transcripts varied by upstream promoter (ups) type. Interestingly, the majority of upsB-type var genes transcribed non-coding transcripts during parasite invasion (purple arrow), whereas the majority of upsA-type and upsC-type var genes did not. Expression is plotted in units of $\log_2(\text{FPKM}+1)$.

upsA-type: *Pf3D7_0425800*, *Pf3D7_1150400*, *Pf3D7_1300300*, *Pf3D7_0800200*, *Pf3D7_1100200*, *Pf3D7_0400400*, *Pf3D7_0100300*, *Pf3D7_0937600*, *Pf3D7_0600400*; upsBA-type: *Pf3D7_0800300*, *Pf3D7_1200400*, *Pf3D7_0600200*, *Pf3D7_0632500*; upsB-type: *Pf3D7_1100100*, *Pf3D7_0800100*, *Pf3D7_0500100*, *Pf3D7_0100100*, *Pf3D7_0115700*, *Pf3D7_0324900*, *Pf3D7_0400100*, *Pf3D7_0900100*, *Pf3D7_0223500*, *Pf3D7_1041300*, *Pf3D7_1200100*, *Pf3D7_0200100*, *Pf3D7_0300100*, *Pf3D7_1255200*, *Pf3D7_0426000*, *Pf3D7_0937800*, *Pf3D7_1000100*, *Pf3D7_1219300*, *Pf3D7_0632800*, *Pf3D7_1373500*, *Pf3D7_0733000*, *Pf3D7_0700100*, *Pf3D7_1300100*, *Pf3D7_0833500*; upsBC-type: *Pf3D7_0413100*, *Pf3D7_1240400*, *Pf3D7_0808700*, *Pf3D7_0712800*, *Pf3D7_0712400*, *Pf3D7_0421100*, *Pf3D7_1240300*; upsC-type: *Pf3D7_0712900*, *Pf3D7_0808600*, *Pf3D7_0420700*, *Pf3D7_0712000*, *Pf3D7_0412900*, *Pf3D7_0420900*, *Pf3D7_0421300*, *Pf3D7_0412400*, *Pf3D7_0712600*, *Pf3D7_0711700*, *Pf3D7_1240600*, *Pf3D7_0412700*, *Pf3D7_0617400*; upsD-type: *Pf3D7_0533100*; upsE-type: *Pf3D7_1200600*.

1. Lavstsen T, Salanti A, Jensen AT, Arnot DE, Theander TG (2003) Sub-grouping of *Plasmodium falciparum* 3D7 var genes based on sequence analysis of coding and non-coding regions. *Malaria Journal* 2: 27.