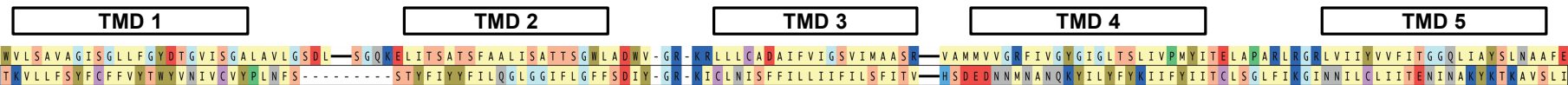
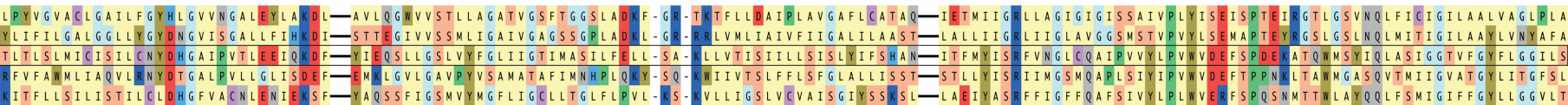
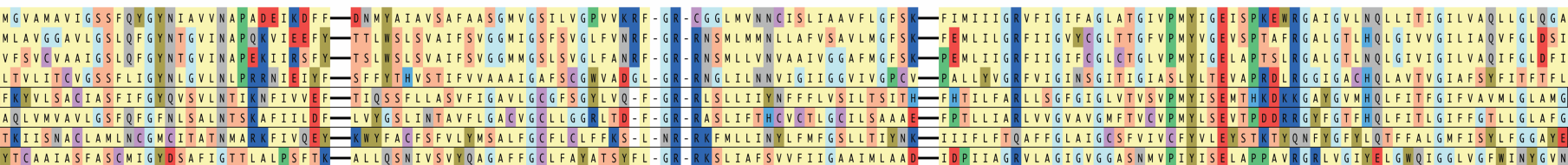
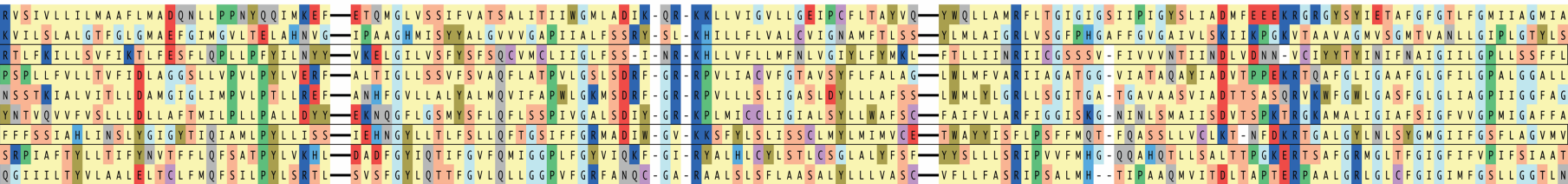


## MAJOR FACILITATOR SUPERFAMILY



## SUGAR PORTER FAMILY

*H. roretzi* 22759733 glucose (p)*H. sapiens* 121751 glucose*X. laevis* 29165704 sugar (p)*S. mansoni* 1078817 glucose**PFB0210c (PHT1)***T. gondii* 21630202 glucose**PFI0955w***N. crassa* 101871 quinate (p)DRUG:H<sup>+</sup> ANTIPORTER-1 FAMILY*P. putida* 26990311 D-glucarate (p)*A. gambiae* 31217117 unknown**PF11\_0059***O. sativa* 37806444 unknown*A. thaliana* 15234530 unknown**PF14\_0260****PFB0275w***P. furiosus* 18976815 unknown*E. coli* 1657592 arabinose (p)**PF14\_0387***G. violaceus* 35212055 tetracycline (p)*E. coli* 135547 metal-tetracycline:H<sup>+</sup>*A. mellifera* 48141033 unknown**PFE0825w***C. elegans* 17539410 tumour suppressing (p)*M. musculus* 6679180 organic cation (p)

## ORGANIC CATION FAMILY

*R. norvegicus* 6981300 organic cation*M. musculus* 31543719 organic anion*H. sapiens* 8923870 organic anion

## MONOCARBOXYLATE PORTER AND OXALATE:FORMATE ANTIPORTER FAMILIES

*A. fulgidus* 11497979 oxalate:formate (p)*L. lactis* 7107009 oxalate:formate**PFB0465c***C. briggsae* 39587811 unknown**PFI1295c***A. gambiae* 21300238 unknown*R. norvegicus* 20301958 aromatic amino acid*H. sapiens* 5730045 monocarboxylate:H<sup>+</sup> (p)*M. musculus* 29336097 monocarboxylate:H<sup>+</sup> (p)*H. sapiens* 19923753 monocarboxylate:H<sup>+</sup>

## PEPTIDE-ACETYL-COENZYME A TRANSPORTER FAMILY

*H. sapiens* 4757708 acetyl-CoA:CoA*C. elegans* 17536529 acetyl-CoA:CoA (p)**PF10\_0360**

**Additional data file 4. The alignment of the *P. falciparum* putative MFS proteins with a representative selection of MFS proteins from other organisms.** The region over TMDs 1-5 of the alignment is shown. Sequences are separated into clusters of well-related sequences and are grouped as subfamilies of the MFS. *P. falciparum* sequences are boxed and the protein designators highlighted. For proteins of other organisms, the NCBI accession (gi) number and the known or putative (p) substrate specificity of the transporter are given. In some proteins, one or more of the extramembrane loop regions have been truncated and this is indicated by a solid black line. Residues are shaded as follows: positively charged, blue; negatively charged, red; hydroxyl, orange; amido, grey; proline, green; cysteine, purple; histidine, mid blue; glycine, light blue; tryptophan and tyrosine, olive green; remaining nonpolar, yellow.