## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1 Description: Differentially expressed genes along the pseudotemporal progression

**File Name:** Supplementary Data 2 **Description:** MPM pathways enrichment for differentially expressed genes along the pseudotemporal progression

**File Name:** Supplementary Data 3 **Description:** Variability index score for SCTS 1,4,5,6 and 7

**File Name:** Supplementary Data 4 **Description:** Highly variable genes for non-isogenic schizonts

File Name: Supplementary Data 5 Description: Highly variable genes for isogenic schizonts

File Name: Supplementary Data 6 Description:. qRT PCR Primer Sequences

File Name: Supplementary Data 7 Description: List of all 3459 SNPs

File Name: Supplementary Data 8 Description:. Genes associated with SNPs in isogenic cells