

**Additional file 3: Expression profile of superoxide dismutase (SOD) gene at different developmental stages of *S. japonicum*.** Real-time PCR was performed to detect the transcripts of SOD at life stages of cercaria, young worm (Young), adult worm (Adult) and egg. Data were analyzed according to  $2^{-\Delta\Delta Ct}$  method using GAPDH as the internal control for each sample. The fold changes of gene transcriptional level in young worm, adult worm and egg were calculated as compared with cercaria.

