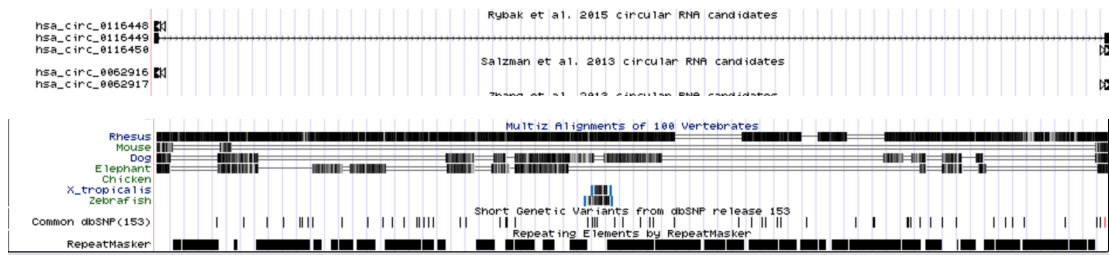
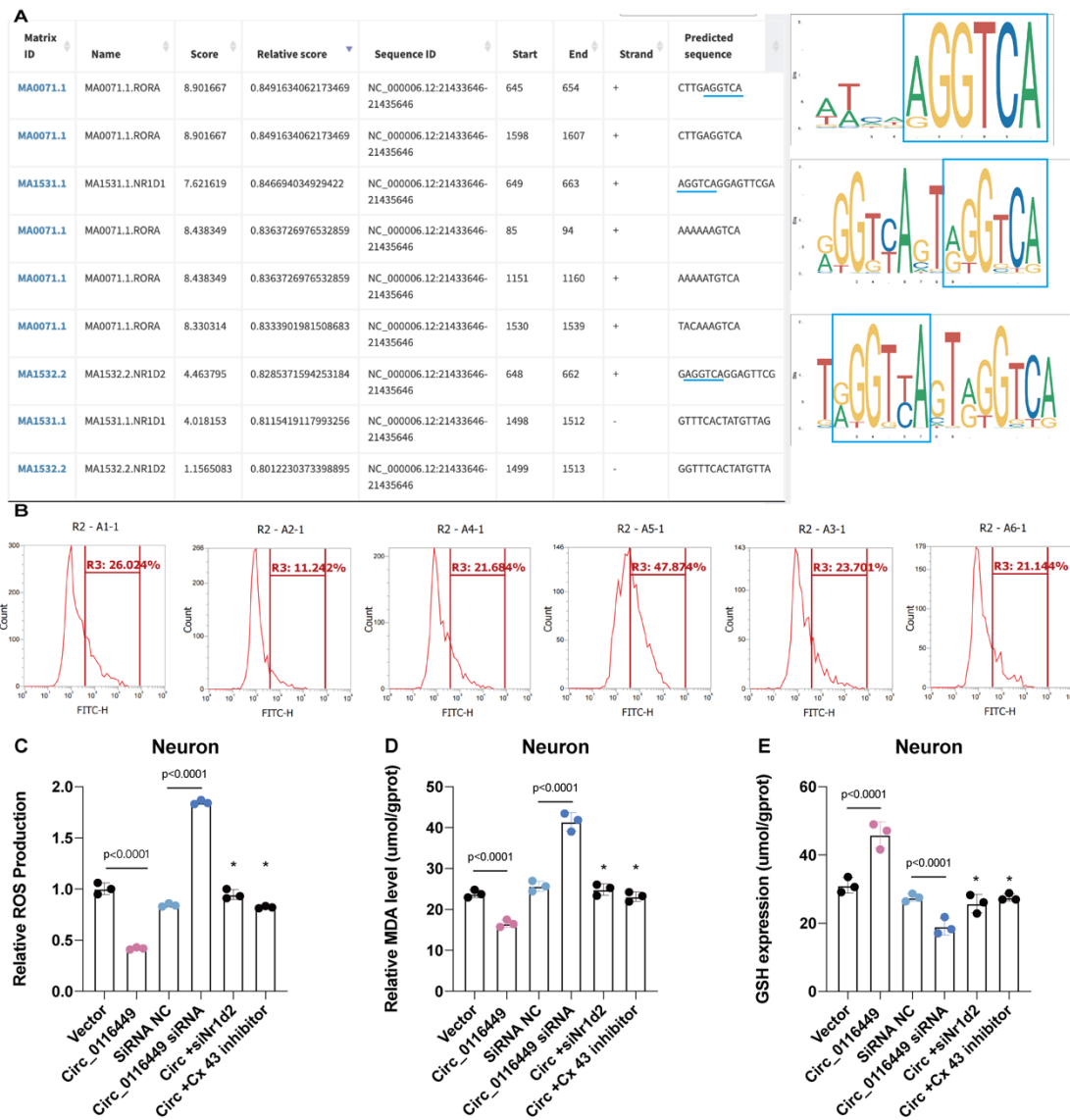


Supp Figure 1. The nuclear receptor family in TBI. (A) The network picture of nuclear receptor family. NR1D1, NR1D2 and RORA are labeled. **(B)** The expression level of NR1D1 in human TBI plasma. **(C)** The expression level of RORA in human TBI plasma. CO: Control, Mi: Mild TBI, Mo: Moderate TBI, Se: Severe TBI.



Supp Figure 2. From the UCSC list, we found only has_circ_0116449 is a full-length circRNA. And when we used the UCSC Genome Browser on Human Assembly (GRCh37/hg19) and searched the chr22:31,927,043-31,942,957, which includes 15914 bp for genomic length, we found the has_circ_0116449 was conserved in Rhesus, Mouse, Dog, Elephant, and Zebrafish. Therefore, we applied mouse model for further in-vivo research.



Supp Figure 3. The JASPAR dataset is used to predict the potential binding among RORA, NR1D1, NR1D2 and promoter of Cx43 (A). The relative ROS production, MDA level and GSH expression among these groups (N=3, in each group; *, P<0.05, B-E)