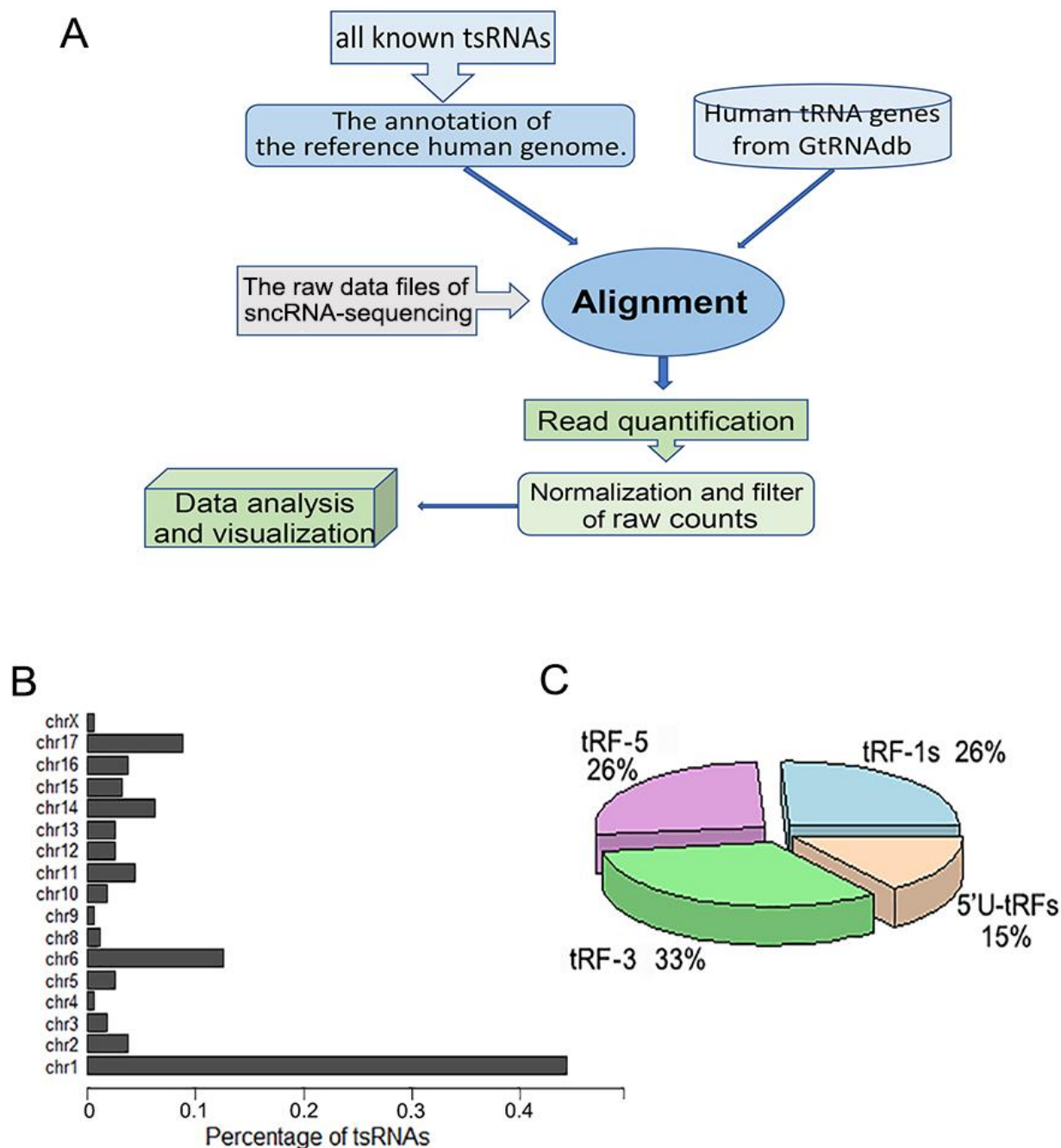


## Supplementary Materials

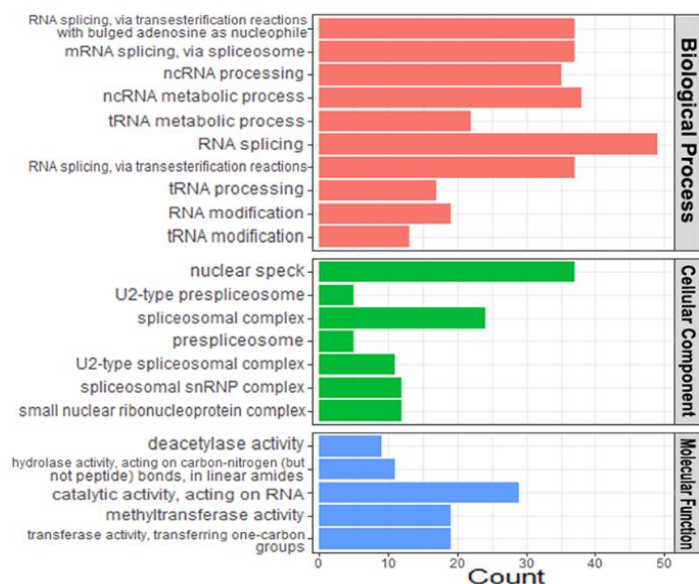
Figure titles and legends in the supplemental information files



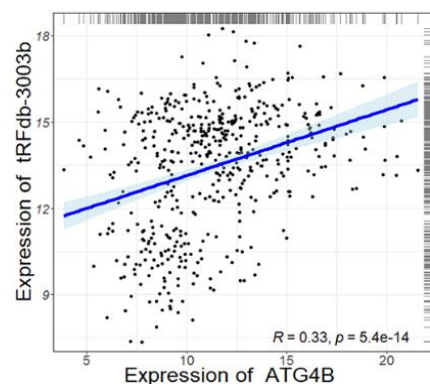
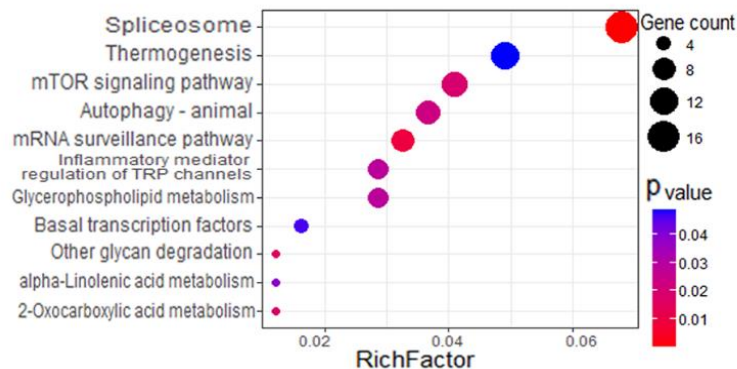
**Figure S1.** A summary of tsRNAs identification and characterization. (A) the flow chart of data processing and tsRNAs identification pipeline. (C) The characterization of tsRNA corresponding derived tRNA gene sources and (B) the chromosome locations statistical analysis.

A

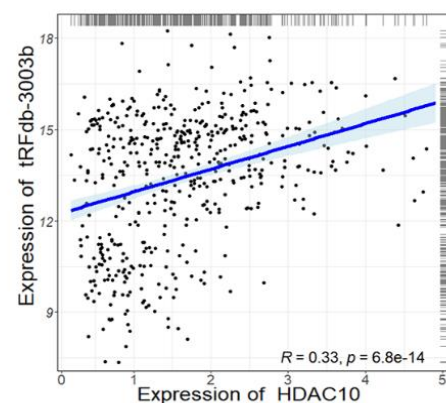
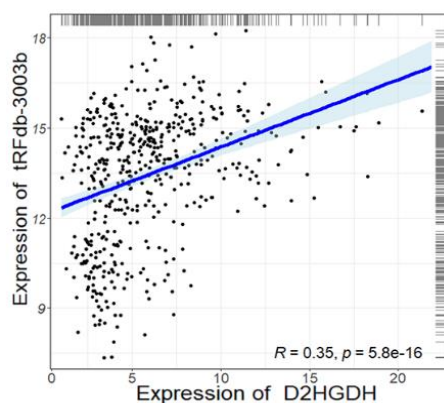
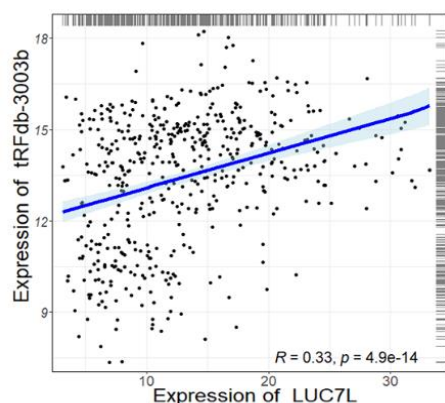
## Go enrichment of top genes for tRFdb-3003b



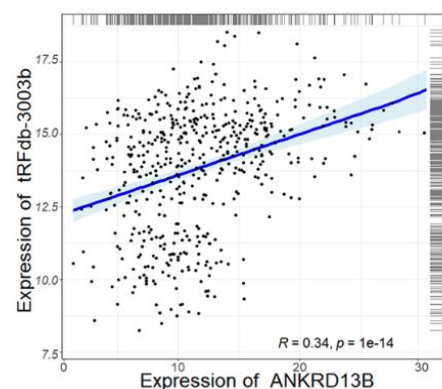
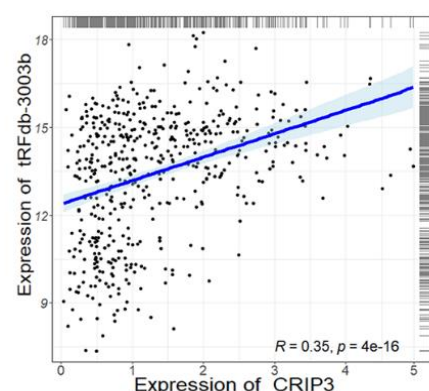
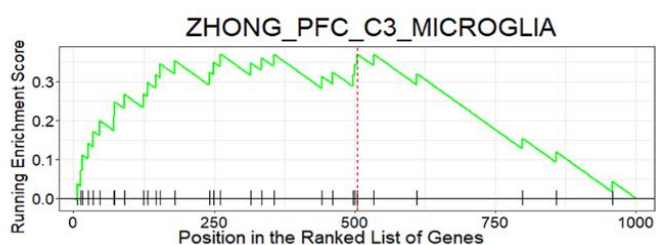
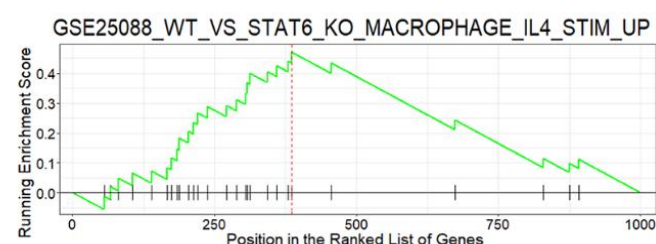
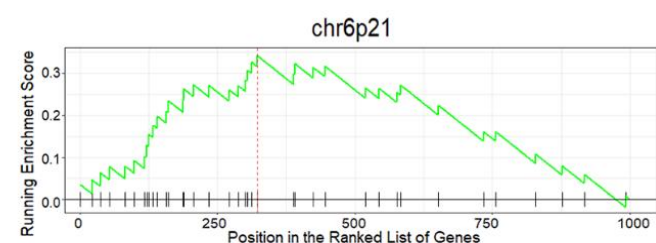
## KEGG enrichment of top genes for tRFdb-3003b



B



C



**Figure S2.** The enrichment analyses of tRFdb-3003b -related genes within TCGA-LGG datasets. **(A)** The top gene ontology (GO) terms, including biological process, CC (cellular component) and MF (molecular function), as well as the top KEGG pathway for tRFdb-3003b-related genes. **(B)** The correlation scatter-plots of tRFdb-3003b and its correlated-genes (ATG4B, LUC7L, D2HGDH, and HDAC10). **(C-left)** GSEA (gene set enrichment analysis) plots of three molecular signatures (chr6p21, microglia, and STIM treatment response signature), **(C-right)** the scatter plots for tRFdb-3003b and its correlated-genes (CRIP3 and ANKRD13B).

## Table titles and footnotes in the supplemental information files

**Table S1.** The primary clinical and molecular pathology characteristics parameters in glioma samples.

**Table S2.** The primers used in quantitative real-time PCR assay.

Primer names	Primer sequences (5'-3')
VAV2 forward	CCTCAAGGACATCAACTTCCG
VAV2 reverse	ACCGCGGAGATGACCTTTCCA
ACTB forward	CATGTACGTTGCTATCCAGGC
ACTB reverse	CTCCTTAATGTCACGCACGAT
U6 forward	GGAACGATACAGAGAAGATTAGC
U6 reverse	TGGAACGCTTCACGAATTTGCG

**Table S3.** A summary of the identified tsRNAs with available expression abundance in glioma datasets.

**Table S4.** The expression profiles of tRNA-Cys-GCA derived tsRNAs with in glioma samples.

All data and materials used or analyzed during the current study are available from the corresponding author upon reasonable request. The supplemental materials have been deposited at: <https://www.aliyundrive.com/s/ziwCstxgNKy>.