

Figure S1. IHC staining of *FAM122B* in normal brain tissue. (A) Representative IHC staining of *FAM122B* in cerebral cortex tissue from a negative control 54-year-old woman (patient ID: 2523). (B) Representative IHC staining of *FAM122B* in cerebral cortex tissue from a normal control 45-year-old man (patient ID: 2521). All original magnification, x4.3. IHC, immunohistochemistry; *FAM122B*, Family with sequence similarity 122, member B.

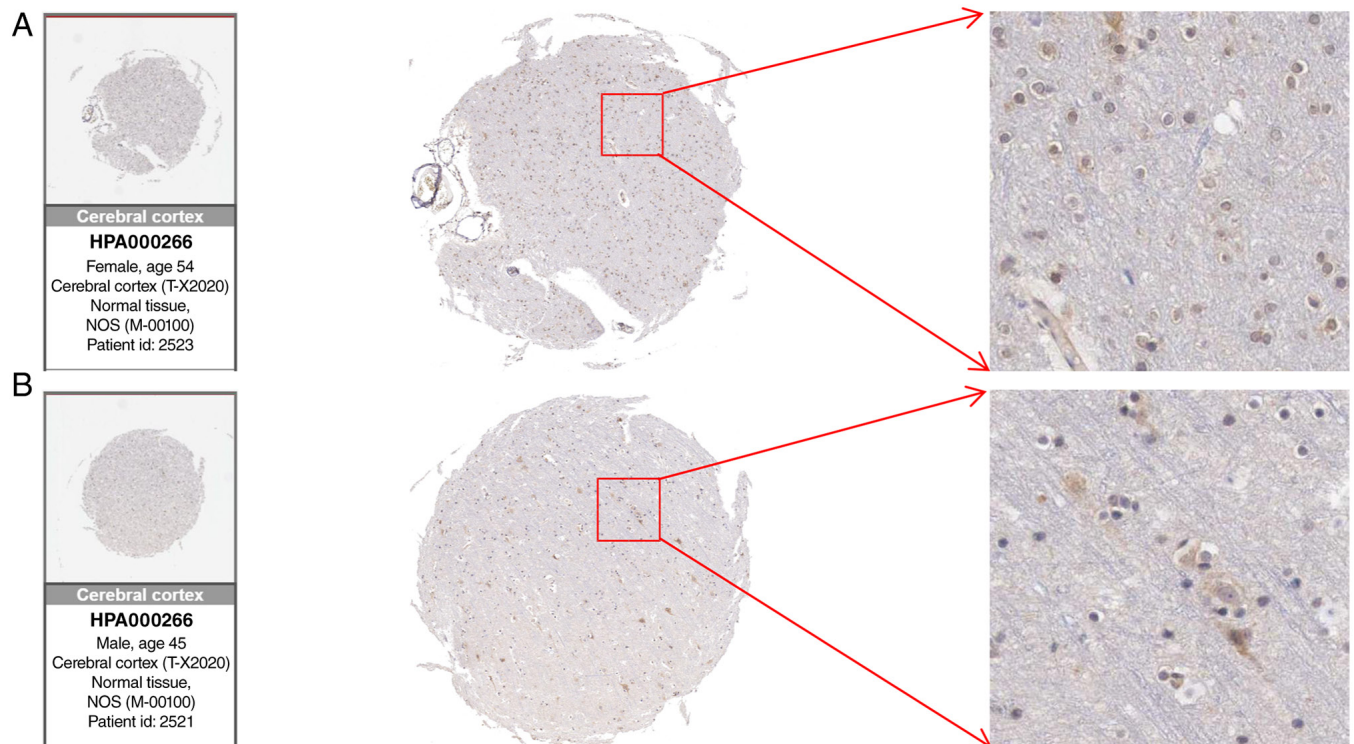


Figure S2. IHC staining of *FAM122B* in LGG tissues. (A) Representative IHC staining of *FAM122B* in the brain tissue of a 36-year-old female patient with LGG (patient ID: 34). (B) Second representative IHC staining of *FAM122B* in the brain tissue of the same 36-year-old female patient with LGG (patient ID: 34). (C) Representative IHC staining of *FAM122B* in the brain tissue of a 45-year-old female patient with LGG (patient ID: 176). (D) Representative IHC staining of *FAM122B* in the brain tissue of a 15-year-old female patient with LGG (patient ID: 158). All original magnification, x4.3. IHC, immunohistochemistry; *FAM122B*, Family with sequence similarity 122, member B; LGG, low-grade glioma.

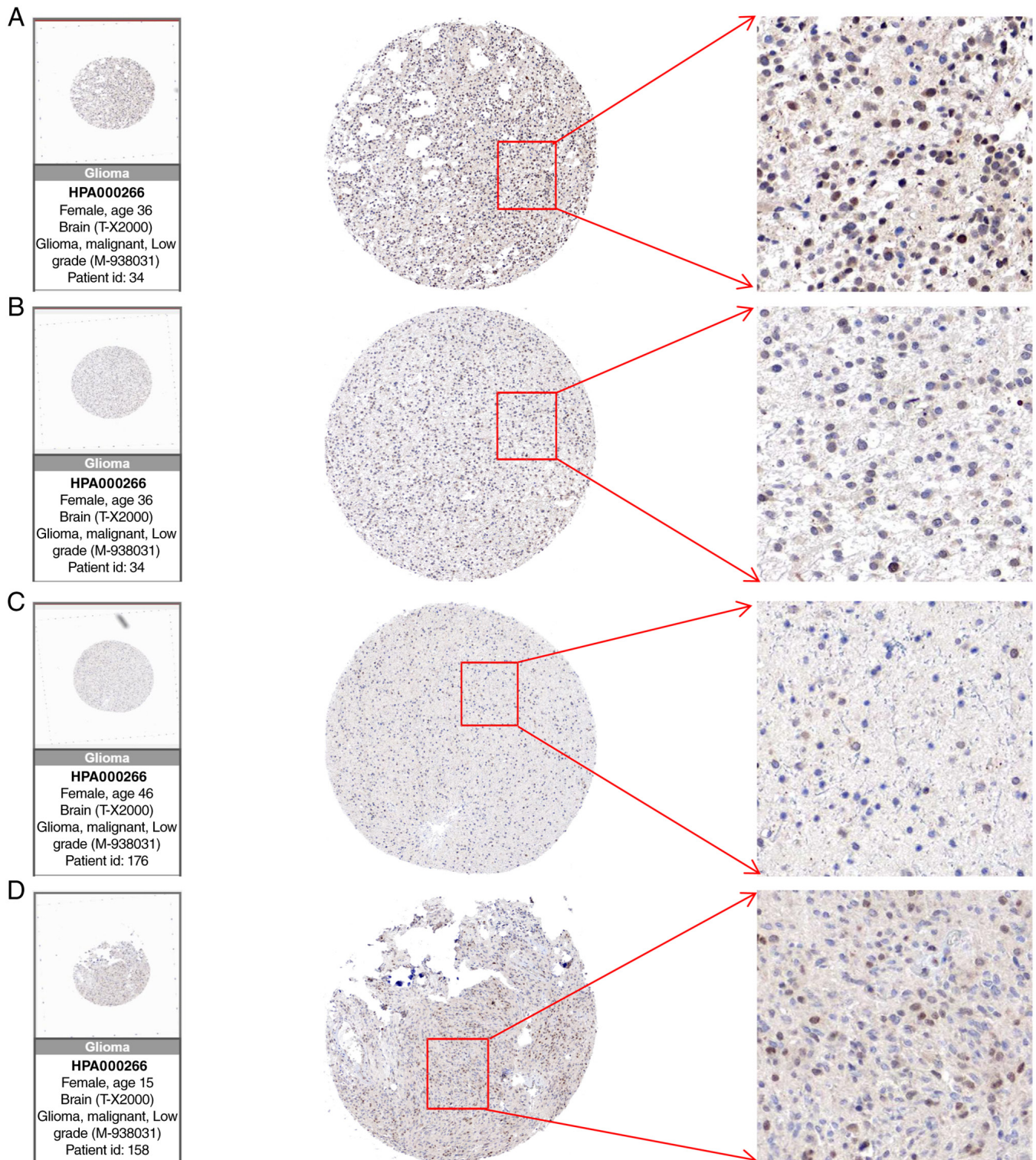


Figure S3. Correlation analysis of *FAM122B* with immune infiltration and verification of transfection efficiency. (A) Correlation analysis between *FAM122B* mRNA expression level and CD8+ T cell infiltration abundance in LGG tissues from the TIMER database. (B) Kaplan-Meier survival analysis of patients with LGG stratified by CD8+ T cell infiltration and *FAM122B* expression levels from the TIMER database. (C) Relative mRNA expression level of *FAM122B* in siFAM122B-transfected cells and nc cells detected by RT-qPCR, *** $P < 0.001$, **** $P < 0.0001$. nc, negative control; *FAM122B*, Family with sequence similarity 122, member B; LGG, low-grade glioma; si, short interfering.

