Glioma Dual-Targeting Nanohybrid Protein Toxin Constructed by Intein-Mediated Site-Specific Ligation for Multistage Booster Delivery

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Supporting Information

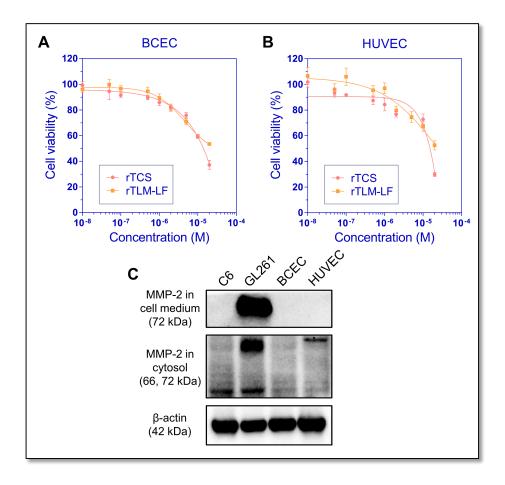


Figure S1. Cytotoxicity of rTCS and rTLM-LF in (A) BCEC and (B) HUVEC cells. (C) MMP-2 expression level in C6, GL621, BCEC, and HUVEC cells.

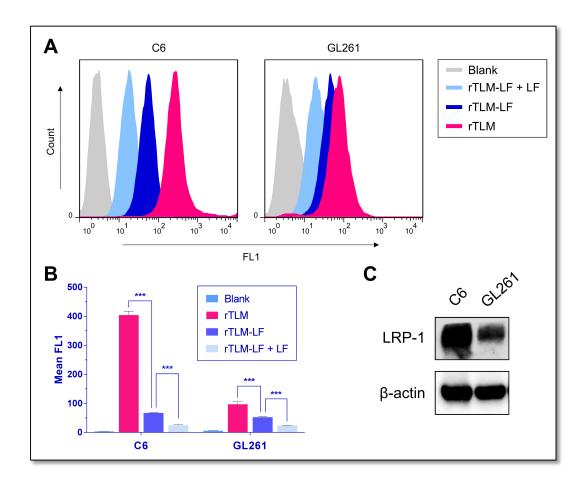


Figure S2. Cellular uptake assay of rTLM, rTLM-LF, and rTLM-LF pretreated with LF in C6 (A) and GL261 cells (B) measured by flow cytometry. (C) LRP-1 expression in C6 and GL261 cells. Statistical analysis was conducted by one-way ANOVA test using GraphPad Prism. (*** p<0.001)

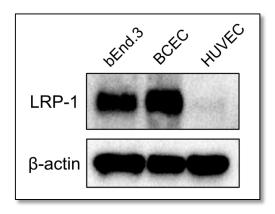


Figure S3. LRP-1 expression level in the bEnd.3, BCEC, and HUVEC cells.

Protein sequence of recombinant TCS-LMWP-MSP

MDVSFRLSGATSSSYGVFISNLRKALPNERKLYDIPLLRSSLPGSQRYALIHLTNYADETI SVAIDVTNVYIMGYRAGDTSYFFNEASATEAAKYVFKDAMRKVTLPYSGNYERLQTAA GKIRENIPLGLPALDSAITTLFYYNANSAASALMVLIQSTSEAARYKFIEQQIGKRVDKTF LPSLAIISLENSWSALSKQIQIASTNNGQFESPVVLINAQNQRVTITNVDAGVVTSNIALLL NRNNMAGGGVSRRRRRGGGRRRRGGGPLGLAG

The sequences in red, orange and blue are TCS, LMWP and MSP, respectively. The "GGG" sequences served as a flexible linker between different domains.