TRIB3

Lu et al. aimed to explore whether tribbles pseudokinase 3 (TRIB3) enhances glioma cell stemness. TRIB3 was overexpressed in glioma tissues and cell-formed spheres, positively correlated with the size and grade. Additionally, TRIB3 expression displayed a negative correlation with the overall survival rate of glioma patients. Moreover, TRIB3 knockdown reduced the stemness of nonadherent spheres, evident by the decreased sphere-forming ability, stemness master expression, and ALDH1 activity, while TRIB3 overexpression enhanced the stemness of adherent cells, which was rescued by β-catenin knockdown. Mechanistically, TRIB3 activated β-catenin signaling via physically interacting with β-catenin. This study suggests that the TRIB3-β-catenin interaction is responsible for glioma cell stemness [1].

1)
Lu Y, Li L, Chen L, Gao Y, Chen X, Cao Y. TRIB3 confers glioma cell stemness via interacting with β-catenin. Environ Toxicol. 2020 Jan 29. doi: 10.1002/tox.22905. [Epub ahead of print] PubMed PMID: 31995275.