

Ryk is a [Tyrosine kinase](#)

Ryk (related-to-receptor tyrosine kinase), an atypical [tyrosine kinase receptor](#).

Adamo et al., report that Ryk (related-to-receptor tyrosine kinase), an atypical tyrosine kinase receptor, is upregulated in samples from [glioblastoma](#) GBM patients as well as in GSCs. Ryk overexpression confers stemness properties to GBM cells through the modulation of the canonical [Wnt signaling pathway](#) and by promoting the activation of pluripotency-related transcription factor circuitry and neurosphere formation ability. In contrast, siRNA-mediated knockdown of Ryk expression suppresses this stem-like phenotype. Rescue experiments reveal that stemness-promoting activity of Ryk is attributable, at least in part, to β -catenin stabilization. Furthermore, Ryk overexpression improves cell motility and anchorage independent cell growth. Taken together, the findings demonstrate that Ryk promotes stem cell-like and tumorigenic features to glioma cells its essential for the maintenance of GSCs and could be a target of novel therapies ¹⁾.

¹⁾

Adamo A, Fiore D, De Martino F, Roscigno G, Affinito A, Donnarumma E, Puoti I, Ricci-Vitiani L, Pallini R, Quintavalle C, Condorelli G. RYK promotes the stemness of glioblastoma cells via the WNT/ β -catenin pathway. Oncotarget. 2017 Jan 9. doi: 10.18632/oncotarget.14564. [Epub ahead of print] PubMed PMID: 28086236.

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