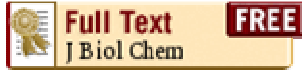




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1: [J Biol Chem](#). 2009 Mar 13. [Epub ahead of print]



Turning cancer stem cells inside-out: an exploration of glioma stem cell signaling pathways.

[Li Z](#), [Wang H](#), [Eyler CE](#), [Rich JN](#).

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Tumors are complex collections of heterogeneous cells with recruited vasculature, inflammatory cells, and stromal elements. Neoplastic cells frequently display a hierarchy in differentiation status. Recent studies suggest that brain tumors have a limited population of neoplastic cells called cancer stem cells with the capacity for sustained self-renewal and tumor propagation. Brain tumor stem cells contribute to therapeutic resistance and tumor angiogenesis. In this review, we summarize recent data regarding critical signaling pathways involved in brain tumor stem cell biology and discuss how targeting these molecules may contribute to the development of novel anti-glioma therapies.

PMID: 19286664 [PubMed - as supplied by publisher]
