ANKRD22

protein family.

Research on ANKRD22 is ongoing, and more studies are needed to fully understand its role in biological processes and diseases.

implicated in several disease processes, including cancer and neurodegenerative disorders.

ANKRD22 (Ankyrin repeat domain-containing protein 22) is a human protein that is encoded by the ANKRD22 gene. It is located on chromosome 17g12 and belongs to the ankyrin repeat-containing

While the function of ANKRD22 is not well understood, some studies have suggested that it may be involved in the regulation of gene expression and cell differentiation. Additionally, ANKRD22 has been

The high expression of ANKRD22 in gliomas and its correlation with survival were identified based on the Cancer Genome Atlas database. Similar expression trends were observed in glioma tissues and cell lines. Functionally, the loss of ANKRD22 suppressed glioma cell proliferation, migration, and invasion and cell cycle progression in vitro and tumor growth in vivo. Mechanistically, ANKRD22 interacted with the E2F transcription factor 1 (E2F1), thereby upregulating maternal embryonic leucine zipper kinase (MELK) protein expression. Moreover, E2F1 overexpression partly restored ANKRD22 silence-mediated tumor suppressive effects in glioma cells. This data highlight the oncogenic role of ANKRD22 in gliomas via E2F1/MELK signaling, which may serve as a promising target for glioma treatment <sup>1)</sup>

## 1)

Liu X, Zhao J, Wu Q, Wang L, Lu W, Feng Y. ANKRD22 promotes glioma proliferation, migration, invasion, and epithelial-mesenchymal transition by upregulating E2F1-mediated MELK expression. J Neuropathol Exp Neurol. 2023 May 10:nlad034. doi: 10.1093/jnen/nlad034. Epub ahead of print. PMID: 37164633.

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