

# MELK

Targeting MEK/MELK in Atypical Teratoid Rhabdoid Tumor: A treatment approach aimed at exploiting blood brain barrier deficiencies <sup>1)</sup>.

## Unclassified

Zou YF, Meng LB, He ZK, Hu CH, Shan MJ, Wang DY, Yu X. Screening and authentication of molecular markers in malignant glioblastoma based on gene expression profiles. *Oncol Lett.* 2019 Nov;18(5):4593-4604. doi: 10.3892/ol.2019.10804. Epub 2019 Sep 4. PubMed PMID: 31611967; PubMed Central PMCID: PMC6781560.

3: Meel MH, Guillén Navarro M, de Gooijer MC, Metselaar DS, Waranecki P, Breur M, Lagerweij T, Wedekind LE, Koster J, van de Wetering MD, Schouten-van Meeteren N, Aronica E, van Tellingen O, Bugiani M, Phoenix TN, Kaspers GJL, Hulleman E. MEK/MELK inhibition and blood-brain barrier-deficiencies in atypical teratoid/rhabdoid tumors. *Neuro Oncol.* 2019 Aug 26. pii: noz151. doi: 10.1093/neuonc/noz151. [Epub ahead of print] PubMed PMID: 31504799.

4: Liu H, Sun Y, Qi X, Gordon RE, O'Brien JA, Yuan H, Zhang J, Wang Z, Zhang M, Song Y, Yu C, Gu C. EZH2 Phosphorylation Promotes Self-Renewal of Glioma Stem-Like Cells Through NF-κB Methylation. *Front Oncol.* 2019 Jul 16;9:641. doi: 10.3389/fonc.2019.00641. eCollection 2019. PubMed PMID: 31380279; PubMed Central PMCID: PMC6652807.

5: Meel MH, de Gooijer MC, Guillén Navarro M, Waranecki P, Breur M, Buil LCM, Wedekind LE, Twisk JWR, Koster J, Hashizume R, Raabe EH, Montero Carcaboso A, Bugiani M, van Tellingen O, van Vuurden DG, Kaspers GJL, Hulleman E. MELK Inhibition in Diffuse Intrinsic Pontine Glioma. *Clin Cancer Res.* 2018 Nov 15;24(22):5645-5657. doi: 10.1158/1078-0432.CCR-18-0924. Epub 2018 Jul 30. PubMed PMID: 30061363.

6: Liu H, Sun Q, Sun Y, Zhang J, Yuan H, Pang S, Qi X, Wang H, Zhang M, Zhang H, Yu C, Gu C. MELK and EZH2 Cooperate to Regulate Medulloblastoma Cancer Stem-like Cell Proliferation and Differentiation. *Mol Cancer Res.* 2017 Sep;15(9):1275-1286. doi: 10.1158/1541-7786.MCR-17-0105. Epub 2017 May 23. PubMed PMID: 28536141.

7: Shoji T, Saito R, Chonan M, Shibahara I, Sato A, Kanamori M, Sonoda Y, Kondo T, Ishii N, Tominaga T. Local convection-enhanced delivery of an anti-CD40 agonistic monoclonal antibody induces antitumor effects in mouse glioma models. *Neuro Oncol.* 2016 Aug;18(8):1120-8. doi: 10.1093/neuonc/now023. Epub 2016 Feb 24. PubMed PMID: 26917236; PubMed Central PMCID: PMC4933484.

8: Safa AR, Saadatzadeh MR, Cohen-Gadol AA, Pollock KE, Bijangi-Vishehsaraei K. Emerging targets for glioblastoma stem cell therapy. *J Biomed Res.* 2016 Jan;30(1):19-31. doi: 10.7555/JBR.30.20150100. Epub 2015 Sep 20. PubMed PMID: 26616589; PubMed Central PMCID: PMC4726830.

9: Liu Y, Hu H, Zhang C, Wang H, Zhang W, Wang Z, Li M, Zhang W, Zhou D, Jiang T. Co-expression of mitosis-regulating genes contributes to malignant progression and prognosis in oligodendrogiomas. *Oncotarget.* 2015 Nov 10;6(35):38257-69. doi: 10.18632/oncotarget.5499. PubMed PMID: 26468983;

PubMed Central PMCID: PMC4741997.

10: Minata M, Gu C, Joshi K, Nakano-Okuno M, Hong C, Nguyen CH, Kornblum HI, Molla A, Nakano I. Multi-kinase inhibitor C1 triggers mitotic catastrophe of glioma stem cells mainly through MELK kinase inhibition. *PLoS One*. 2014 Apr;16(9):e92546. doi: 10.1371/journal.pone.0092546. eCollection 2014. PubMed PMID: 24739874; PubMed Central PMCID: PMC3989164.

11: Yoshimoto K, Ma X, Guan Y, Mizoguchi M, Nakamizo A, Amano T, Hata N, Kuga D, Sasaki T. Expression of stem cell marker and receptor kinase genes in glioblastoma tissue quantified by real-time RT-PCR. *Brain Tumor Pathol*. 2011 Oct;28(4):291-6. doi: 10.1007/s10014-011-0046-0. Epub 2011 Jun 21. PubMed PMID: 21691733; PubMed Central PMCID: PMC3196642.

12: Natsume A, Kinjo S, Yuki K, Kato T, Ohno M, Motomura K, Iwami K, Wakabayashi T. Glioma-initiating cells and molecular pathology: implications for therapy. *Brain Tumor Pathol*. 2011 Feb;28(1):1-12. doi: 10.1007/s10014-010-0011-3. Epub 2011 Jan 28. Review. PubMed PMID: 21274750.

13: Nakano I, Kornblum HI. Methods for analysis of brain tumor stem cell and neural stem cell self-renewal. *Methods Mol Biol*. 2009;568:37-56. doi: 10.1007/978-1-59745-280-9\_4. PubMed PMID: 19582420.

14: Nakano I, Masterman-Smith M, Saigusa K, Paucar AA, Horvath S, Shoemaker L, Watanabe M, Negro A, Bajpai R, Howes A, Lelievre V, Waschek JA, Lazareff JA, Freije WA, Liau LM, Gilbertson RJ, Cloughesy TF, Geschwind DH, Nelson SF, Mischel PS, Terskikh AV, Kornblum HI. Maternal embryonic leucine zipper kinase is a key regulator of the proliferation of malignant brain tumors, including brain tumor stem cells. *J Neurosci Res*. 2008 Jan;86(1):48-60. PubMed PMID: 17722061.

1)

Popovski D, Huang A. Targeting MEK/MELK in Atypical Teratoid Rhabdoid Tumour: A treatment approach aimed at exploiting blood-brain barrier deficiencies. *Neuro Oncol*. 2019 Nov 10. pii: noz217. doi: 10.1093/neuonc/noz217. [Epub ahead of print] PubMed PMID: 31711169.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**



Permanent link:

<https://neurosurgerywiki.com/wiki/doku.php?id=melk>

Last update: **2024/06/07 02:58**