



Compound with selective inhibition potential against P300 and CBT

A compound to treat pediatric sarcoma through the inhibition of P300 and CBT

IP Status: Provisional Patent Application Filed

Applications

- Therapeutics for pediatric sarcoma (CDS)

Technology Overview

CIC-DUX4 sarcoma (CDS) is a highly aggressive and metastatic type of cancer that occurs predominantly in children and young adults. Patients with CDS show an aggressive clinical course with a high metastatic rate and quickly develop resistance to chemotherapy. Current treatment approaches have poor and unsatisfactory outcomes. To address this therapeutic gap, researchers at the University of Minnesota have developed a P300/CBP inhibitor compound named iP300w that efficiently suppresses CIC-DUX4 transcriptional activity and reverses CIC-DUX4 induced acetylation. At low doses, iP300w has shown specificity to CDS cancer cell lines, rapidly inducing cell cycle arrest and preventing growth of established CDS xenograft tumors when delivered in vivo. The effectiveness of iP300w to inactivate CIC-DUX4 constitutes a promising therapeutic opportunity for CDS.

Phase of Development

TRL: 2-3

The novel P300/CBT inhibitor compound has shown potent activity against CDS cell lines in vitro, and in an in vivo cancer xenograft assay.

Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

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Researchers

- [Michael Kyba, PhD](#) Professor, Department of Pediatrics
- [Darko Bosnakovski, PhD](#) Assistant Professor, Department of Pediatrics

References

1. Bosnakovski, D., Ener, E.T., Cooper, M.S., Gearhart, M.D., Knights, K.A., Xu, N.C., Palumbo, C.A., Toso, E.A., Marsh, G.P., Maple, H.J. and Kyba, M.(2021) , Inactivation of the CIC-DUX4 oncogene through P300/CBP inhibition, a therapeutic approach for CIC-DUX4 sarcoma, <https://doi.org/10.1038/s41389-021-00357-4>

Technology ID

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