

## **Data Sheet**

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 Product Name
 : MEISi-1

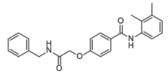
 Cat. No.
 : PC-20504

 CAS No.
 : 446306-43-0

 Molecular Formula
 : C<sub>24</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>

 Molecular Weight
 : 388.47

Target : Other Targets
Solubility : 10 mM in DMSO



CAS: 446306-43-0

## **Biological Activity**

MEISi-1 (MEIS inhibitor 1) is a specific small molecule inhibitor of **MEIS1** (Meis1), significantly inhibits MEIS1 protein activity in MEIS-luc reporter assays at 0.1 uM, modulates hematopoietic stem cell (HSC) activity.

MEISi-1 (0.1-10 uM) induced MEIS dependent hematopoietic stem cell maintenance and self-renewal.

MEISi-1 downregulated MEIS target gene expression (Hif- $1\alpha$ , Hif- $2\alpha$ , and HSC quiescence modulators Foxo3, Nfat5, and Ptpmt1).

MEISi-1 functionally inhibited MEIS in vivo, induces c-Kit+ cell, Sca1+ cell, CD150+cell, LSK HSPCs, LSKCD34low HSC content and LSKCD150+CD48-HSC content.

MEISi-1 was effective in vivo as evident by induced HSC content in the murine bone marrow and downregulation of expression of MEIS target genes.

## References

Raife Dilek Turan, et al. *Sci Rep*. 2020 May 14;10(1):7994.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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