

## **Data Sheet**

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**Product Name** : PERK activator MK-28

 Cat. No.
 : PC-72030

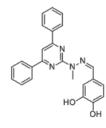
 CAS No.
 : 864388-65-8

 Molecular Formula
 : C<sub>24</sub>H<sub>20</sub>N<sub>4</sub>O<sub>2</sub>

 Molecular Weight
 : 396.45

 Target
 : PERK

**Solubility** : 10 mM in DMSO



## **Biological Activity**

PERK activator MK-28 is a potent, selective small molecule PERK activator with EC50 of 490 nM.

MK-28 shows little or no effect on EIF2AK1 (HRI) or EIF2AK2 (PKR), weakly activated EIF2AK4 (GCN2) with EC50 of 3.5 uM, also displays high selectivity on a panel of 391 kinases.

MK-28 rescues cells from ER stress-induced apoptosis.

MK-28 is predicted to interact with the PERK activation loop and its cellular protective effect is PERK-dependent and more potent than CCT020312.

MK-28 exhibits brain penetrance and improves neurological functions in the R6/2 HD mouse model.

MK-28 improves systemic function and survival in R6/2 mice and induces increased levels of eIF2 $\alpha$ -P in the mouse brain striatum.

## References

Javier Ganz, et al. *Sci Rep.* 2020 Apr 23;10(1):6875.

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

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