Product Data Sheet

PERK-IN-4

Cat. No.:HY-137813CAS No.:1337531-89-1Molecular Formula: $C_{24}H_{19}F_4N_5O$ Molecular Weight:469.43Target:PERK

Pathway: Cell Cycle/DNA Damage

Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 6 months

-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro DMSO: 20.83 mg/mL (44.37 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1302 mL	10.6512 mL	21.3024 mL
	5 mM	0.4260 mL	2.1302 mL	4.2605 mL
	10 mM	0.2130 mL	1.0651 mL	2.1302 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo 1. Add each solvent one by one: 10% DMSO >> 90% corn oil

Solubility: ≥ 2.08 mg/mL (4.43 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	PERK-IN-4 is a potent and selective PERK (protein kinase R (PKR)-like endoplasmic reticulum kinase) inhibitor with an IC ₅₀ of 0.3 nM. PERK is activated in response to a variety of endoplasmic reticulum stresses implicated in numerous disease states ^[1] .
IC ₅₀ & Target	IC50: 0.3 nM (PERK) ^[1]

REFERENCES

[1]. Axten JM, et al. Discovery of 7-methyl-5-(1-{[3-(trifluoromethyl)phenyl]acetyl}-2,3-dihydro-1H-indol-5-yl)-7H-pyrrolo[2,3-d]pyrimidin-4-amine (GSK2606414), a potent and selective first-in-class inhibitor of protein kinase R (PKR)-like endoplasmic reticulu

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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