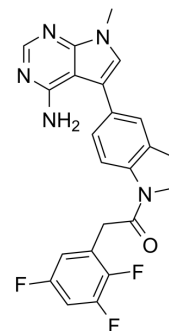


PERK-IN-2

Cat. No.:	HY-135220		
CAS No.:	1337531-83-5		
Molecular Formula:	C ₂₃ H ₁₈ F ₃ N ₅ O		
Molecular Weight:	437.42		
Target:	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 : 10 mg/mL (22.86 mM; ultrasonic and warming and heat to 80°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.2861 mL	11.4307 mL	22.8613 mL
		5 mM	0.4572 mL	2.2861 mL	4.5723 mL
10 mM		0.2286 mL	1.1431 mL	2.2861 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1 mg/mL (2.29 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1 mg/mL (2.29 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1 mg/mL (2.29 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	PERK-IN-2 is a potent PERK inhibitor with an IC ₅₀ of 0.2 nM ^[1] .
IC₅₀ & Target	IC ₅₀ : 0.2 nM (PERK) ^[1]
In Vitro	PERK-IN-2 (0.03-0.3 μM; 2 hours) inhibits PERK autophosphorylation in A459 cells with IC ₅₀ value ranging from 0.03–0.1 μM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay^[1]

Cell Line:	A459 cells
Concentration:	0.03 μ M, 0.1 μ M, 0.3 μ M
Incubation Time:	2 hours
Result:	Inhibited PERK autophosphorylation in A459 cells.

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 reticul

Caution: Product has not been fully validated for medical applications. For research use only.

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