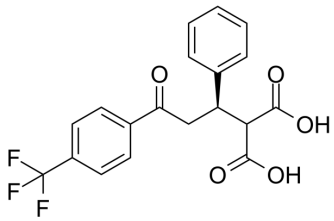
(R)-PS210

Cat. No.:	HY-13856
CAS No.:	1410101-89-1
Molecular Formula:	$C_{19}H_{15}F_3O_5$
Molecular Weight:	380.31
Target:	PDK-1
Pathway:	PI3K/Akt/mTOR
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 : 230 mg/mL (604.77 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6294 mL	13.1472 mL	26.2943 mL
	5 mM	0.5259 mL	2.6294 mL	5.2589 mL
	10 mM	0.2629 mL	1.3147 mL	2.6294 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 5.75 mg/mL (15.12 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 5.75 mg/mL (15.12 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 5.75 mg/mL (15.12 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(R)-PS210, the R enantiomer of PS210 (compound 4h-eutomer), is a substrate-selective allosteric activator of PDK1 with an AC_{50} value of 1.8 μM. (R)-PS210 targets to the PIF-binding pocket of PDK1. PIF: The protein kinase C-related kinase 2 (PRK2)-interacting fragment[1].

IC_{50} & Target

AC50: 1.8 μM (PDK1)[1]

In Vitro

(R)-PS210 displays an AC_{50} value of 1.8 μM towards PDK1 in a Cell-Free Kinase Activity Assay. And the maximum activation of

PDK1 compared to DMSO control of (R)-PS210 is 5.5 fold[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Wilhelm A, et al. 2-(3-Oxo-1,3-diphenylpropyl)malonic acids as potent allosteric ligands of the PIF pocket of phosphoinositide-dependent kinase-1: development and prodrug concept.J Med Chem. 2012 Nov 26;55(22):9817-30.

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