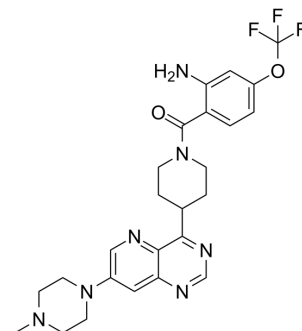


BAY885

Cat. No.:	HY-112082
CAS No.:	2307249-33-6
Molecular Formula:	C ₂₅ H ₂₈ F ₃ N ₇ O ₂
Molecular Weight:	515.53
Target:	ERK
Pathway:	MAPK/ERK Pathway; Stem Cell/Wnt
Storage:	-20°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 16.67 mg/mL (32.34 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.9398 mL	9.6988 mL	19.3975 mL
	5 mM	0.3880 mL	1.9398 mL	3.8795 mL
	10 mM	0.1940 mL	0.9699 mL	1.9398 mL

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

In Vivo

- Add each solvent one by one: 5% DMSO >> 40% PEG300 >> 5% Tween-80 >> 50% saline
Solubility: ≥ 2.5 mg/mL (4.85 mM); Clear solution
- Add each solvent one by one: 5% DMSO >> 95% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (4.85 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 1.67 mg/mL (3.24 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 1.67 mg/mL (3.24 mM); Clear solution
- Add each solvent one by one: 1% DMSO >> 99% saline
Solubility: 0.5 mg/mL (0.97 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

BAY885 is a highly potent and selective ERK5 inhibitor with an IC₅₀ of 35 nM. BAY885 shows weak inhibition on others kinases [1].

IC₅₀ & Target

ERK5

	35 nM (IC ₅₀)
In Vitro	The ERK5 probe 41 (BAY-885) showed potent ERK5 kinase and transcriptional inhibition in the SN12C-MEF2 reporter cell line (IC ₅₀ = 115 nM/IC ₉₀ = 691 nM) and had no effects on a reporter control cell line with constitutive luciferase expression (SN12C-CMV-luc, IC ₅₀ > 30 μM) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Nguyen D, et al. Discovery and Characterization of the Potent and Highly Selective (Piperidin-4-yl)pyrido[3,2- d]pyrimidine Based in Vitro Probe BAY-885 for the Kinase ERK5. J Med Chem. 2019 Jan 24;62(2):928-940.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA