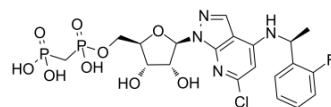


AB-680

Cat. No.:	HY-125286
CAS No.:	2105904-82-1
Molecular Formula:	C ₂₀ H ₂₄ ClFN ₄ O ₉ P ₂
Molecular Weight:	580.82
Target:	CD73
Pathway:	Immunology/Inflammation
Storage:	-20°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 200 mg/mL (344.34 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.7217 mL	8.6085 mL	17.2170 mL
	5 mM	0.3443 mL	1.7217 mL	3.4434 mL
	10 mM	0.1722 mL	0.8609 mL	1.7217 mL

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

In Vivo

- Add each solvent one by one: 1% DMSO >> 99% saline
Solubility: ≥ 0.5 mg/mL (0.86 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 7.5 mg/mL (12.91 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 7.5 mg/mL (12.91 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 7.5 mg/mL (12.91 mM); Clear solution
- Add each solvent one by one: 5% DMSO >> 40% PEG300 >> 5% Tween-80 >> 50% saline
Solubility: ≥ 2.5 mg/mL (4.30 mM); Clear solution
- Add each solvent one by one: 5% DMSO >> 95% (20% SBE-β-CD in saline)
Solubility: 2.5 mg/mL (4.30 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

AB-680 is highly potent, reversible and selective small molecule inhibitor of CD73 (an ecto-nucleotidase), with a K_i of 4.9 pM for hCD73, displays >10,000-fold selectivity over related ecto-nucleotidases CD39. Anti-tumor activity^[1].

IC₅₀ & Target	Ki: 4.9 pM (hCD73) ^[1] IC50: 43 pM (Soluble hCD73) ^[1]
In Vitro	AB-680 (AB680) inhibits soluble hCD73 with an IC ₅₀ of 0.043 nM, also inhibits hCD73 in CHO cells, suppresses CD73 in human, mouse CD8 ⁺ T Cells and hPBMC, with IC ₅₀ s of 0.070, 0.008, 0.66 and 0.011 nM, respectively ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Research Square Preprint. 2021 Mar.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Lawson KV, et al. Discovery and Characterization of AB680, a Potent and Selective Small-Molecule CD73 Inhibitor for Cancer Immunotherapy.

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

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