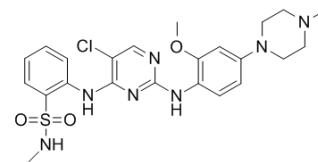


ALK inhibitor 2

Cat. No.:	HY-15358		
CAS No.:	761438-38-4		
Molecular Formula:	C ₂₃ H ₂₈ ClN ₇ O ₃ S		
Molecular Weight:	518.03		
Target:	ALK; FAK		
Pathway:	Protein Tyrosine Kinase/RTK		
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 : 50 mg/mL (96.52 mM; Need ultrasonic)
H₂O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.9304 mL	9.6519 mL	19.3039 mL
	5 mM	0.3861 mL	1.9304 mL	3.8608 mL
	10 mM	0.1930 mL	0.9652 mL	1.9304 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (4.83 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (4.83 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

ALK inhibitor 2 (compound 18) is a potent pyrimidin ALK inhibitor. ALK inhibitor 2 is a potent inhibitor of testis-specific serine/threonine kinase 2 (TSSK2; IC₅₀=37 nM) and focal adhesion kinase (FAK; IC₅₀=5 nM)^[1].

IC₅₀ & Target

IC₅₀: 37 nM (TSSK2) and 5 nM (FAK)^[1]

In Vitro

Testis-specific serine/threonine kinase 2 (TSSK2) is an important target for reversible male contraception. ALK inhibitor 2 (compound 18) contains a methylpiperazine A ring (R1=Me, X=N) and a D ring with R5=methylsulfonamide. ALK inhibitor 2 can undergo metabolic oxidation to form reactive adducts in the presence of glutathione^[1].

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

REFERENCES

[1]. Jon E Hawkinson, et al. Potent Pyrimidine and Pyrrolopyrimidine Inhibitors of Testis-Specific Serine/Threonine Kinase 2 (TSSK2). ChemMedChem. 2017 Nov 22;12(22):1857-1865.

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

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