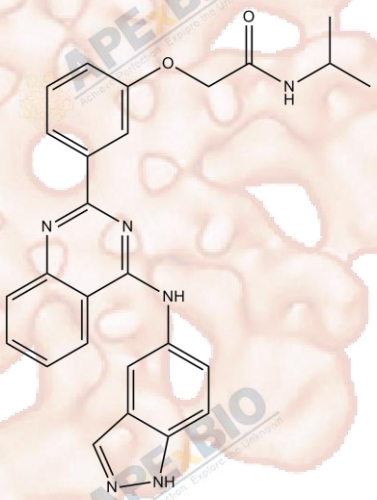
Product Data Sheet

SLx-2119

Cat. No.:	A3825
CAS No.:	911417-87-3
Formula:	C26H24N6O2
M.Wt:	452.51
Synonyms:	SLx 2119;SLx2119;ROCK inhibitor;KD-025
Target:	TGF-β / Smad Signaling
Pathway:	ROCK
Storage:	Store at -20°C



Solvent & Solubility

In Vitro

⩾22.65 mg/mL in DMSO; insoluble in H2O; ⩾26.4 mg/mL in EtOH with gentle warming and ultrasonic

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.2099 mL	11.0495 mL	22.0990 mL
5 mM	0.4420 mL	2.2099 mL	4.4198 mL
10 mM	0.2210 mL	1.1049 mL	2.2099 mL

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

Biological Activity

Shortsummary	Selective ROCK2 inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Human microvascular endothelial cells (HMVEC; CC-2527, Cambrex).
Preparation method:	Dissolved in DMSO to obtain a stock solution of 20 mM [1]. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored

		below -20°C for several months.
	Reacting conditions:	3 ml culture media containing 10 μM or 40 μM SLx-2119; 24 h.
	Applications:	SLx-2119 at 40 μM significantly reduces the mRNA levels of Tsp-1 and CTGF.
In Vivo	**Animal experiment**	
	Animal models:	C57BL/6 mice.
	Dosage form:	100, 200 or 300 mg/kg; administered every 12 h for 2 days via orogastric gavage.
	Applications:	KD025 (formerly SLx-2119) reduces infarct volume by 30% and 40% at 100 and 200 mg/kg dose levels. KD025 (200 mg/kg 90 min before distal middle cerebral artery occlusion (dMCAO)) significantly reduces the area of perfusion defect, suggesting that ROCK2 inhibition improves cortical perfusion during acute cerebral arterial occlusion.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. De Silva TM, Modrick ML, et al. "Changes in Cerebral Arteriesand Parenchymal Arterioles With Aging: Role of Rho Kinase 2 and Impact of GeneticBackground." Hypertension. 2018 Mar 12. pii: HYPERTENSIONAHA.118.10865.PMID:29531174

See more customer validations on www.apexbt.com.

References

[1]. Boerma M, Fu Q, Wang J, et al. Comparative gene expression profiling in three primary human cell lines after treatment with a novel inhibitor of Rho kinase or atorvastatin. Blood Coagul Fibrinolysis, 2008, 19(7): 709-718.
[2]. Lee JH, Zheng Y, von Bornstadt D, et al. Selective ROCK2 Inhibition In Focal Cerebral Ischemia. Ann Clin Transl Neurol, 2014, 1(1): 2-14.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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