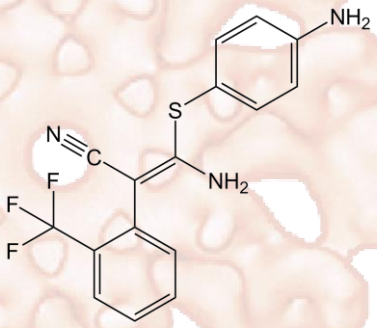
Product Data Sheet

SL-327



Cat. No.: A1894

CAS No.: 305350-87-2

Formula: C16H12F3N3S

M.Wt: 335.35

Synonyms:

Target: MAPK Signaling

Pathway: MEK1/2

Storage: Store at -20°C

Solvent & Solubility

In Vitro

≥16.75mg/mL in DMSO

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1mg	5mg	10mg
1 mM	2.9820 mL	14.9098 mL	29.8196 mL
5 mM	0.5964 mL	2.9820 mL	5.9639 mL
10 mM	0.2982 mL	1.4910 mL	2.9820 mL

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

Biological Activity

Shortsummary	Selective MEK1/2 inhibitor
IC_{50} & Target	0.18 μM (MEK1), 0.22 μM (MEK2)
In Vitro	**Cell Viability Assay**
	Preparation method：
In Vivo	**Animal experiment**
	Animal models: Adult male CD-1 mice, Morphine-pretreated rats
	Dosage form: 50 mg/kg, diluted 1:1 in water and DMSO immediately before the injection, Intraperitoneal injection,
	Applications: In adult male CD-1 mice, SL-327 (50 mg/kg, i.p.) inhibited Pp-ERK

	immunostaining in the nuclei of the cells induced by cocaine. SL-327 (50 mg/kg, i.p.) pretreatment inhibited c-Fos expression in nuclear and inhibited activation of ERK within all the amygdala. In morphine-pretreated rats, SL-327 (20 mg/kg, i.p.) increased (58%) the expression of morphine-induced psychomotor sensitization (SW3) and fully prevented the upregulation of p-PEA-15, p-FADD, and p-Akt1 at SW3.
Preparation method:	The solubility of this compound in DMSO is >16.8mg/mL. 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.
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. White SM, Avantaggiati ML, et al. "YAP/TAZ Inhibition Induces Metabolic and Signaling Rewiring Resulting in Targetable Vulnerabilities in NF2-Deficient Tumor Cells." Dev Cell. 2019 May 6;49(3):425-443.e9.PMID:31063758

2. Kim JW, Ko MJ, et al. "Social support rescues acute stress-induced cognitive impairments by modulating ERK1/2 phosphorylation in adolescent mice." Sci Rep. 2018 Aug 13;8(1):12003.PMID:30104581

See more customer validations on www.apexbt.com.

References

[1]. Scherle P A, Ma W, Lim H, et al. Regulation of Cyclooxygenase-2 Induction in the Mouse Uterus During Decidualization AN EVENT OF EARLY PREGNANCY[J]. Journal of Biological Chemistry, 2000, 275(47): 37086-37092.

[2]. Radwanska K, Caboche J, Kaczmarek L. Extracellular signal‐regulated kinases (ERKs) modulate cocaine‐induced gene expression in the mouse amygdala[J]. European Journal of Neuroscience, 2005, 22(4): 939-948.

[3] Ramos-Miguel A, Esteban S, García-Sevilla J A. The time course of unconditioned morphine-induced psychomotor sensitization mirrors the phosphorylation of FADD and MEK/ERK in rat striatum: role of PEA-15 as a FADD-ERK binding partner in striatal plasticity[J]. European Neuropsychopharmacology, 2010, 20(1): 49-64.

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.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com