

# SL327

Catalog No: tcsc0910



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

305350-87-2

**Formula:**

$C_{16}H_{12}F_3N_3S$

**Pathway:**

MAPK/ERK Pathway

**Target:**

MEK

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 68 mg/mL (202.77 mM; Need ultrasonic); Ethanol : 0.1 mg/mL (0.30 mM; Need ultrasonic and warming)

**Observed Molecular Weight:**

335.35

## Product Description

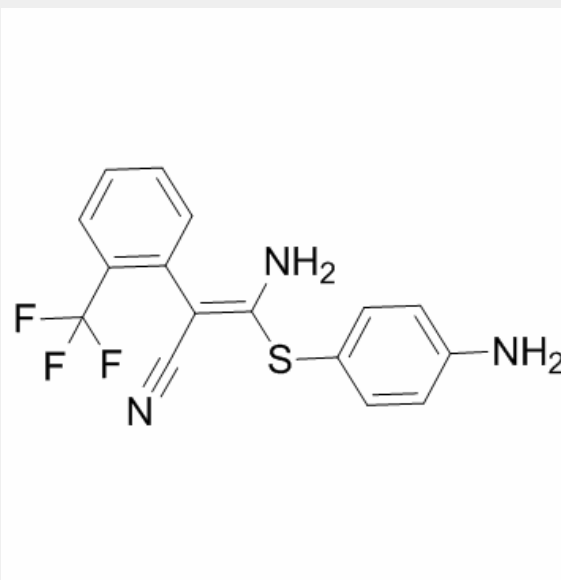
SL327 inhibits **MEK1** and **MEK2**, with **IC<sub>50</sub>** values of 180 nM and 220 nM, respectively.

IC50 & Target: IC50: 180 nM (MEK1), 220 nM (MEK2)<sup>[1]</sup>

***In Vitro:***

The specificity of SL327 for MEK is investigated. Kinase activity is assessed by measuring the incorporation of [32P]phosphate during phosphorylation of substrate peptides specific for each kinase. Although SL327 inhibits MEK with an  $IC_{50}$  of 0.27  $\mu$ M, 10  $\mu$ M SL327 has no significant effect on PKA, CaMKII, or PKC<sup>[2]</sup>.

**In Vivo:** SL327, which crosses the blood-brain barrier, is administered intraperitoneally at several concentrations to animals prior to cue and contextual fear conditioning. Administration of SL327 completely blocks contextual fear conditioning and significantly attenuates cue learning when measure 24 hr after training. Animals treated with SL327 exhibit significant attenuation of water maze learning; they take significantly longer to find a hidden platform compared with vehicle-treated controls and also fail to use a selective search strategy during subsequent probe trials in which the platform is removed. Mice are injected with various concentrations of SL327 (10, 30, 50 mg/kg i.p.), and 1 hr later their hippocampi are removed and assayed for activated MAPK. SL327 attenuates phosphorylated MAPK levels in a dose-dependent manner. Administration of 10, 30, or 50 mg/kg SL327 significantly attenuates p42 phospho-MAPK levels ( $F=20.90$ ,  $P[2]$ ).



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!