

SP2509, LSD1 Inhibitor

Catalog	Unit
TBI4019-5MG	5 mg
TBI4019-25MG	25 mg

Product Details

Formal Name: (E)-N'-(1-(5-Chloro-2-hydroxyphenyl)ethylidene)-3-(morpholinosulfonyl)benzohydrazide

Molecular Formula: C₁₉H₂₀ClN₃O₅S

Formula Weight: 437.90

CAS Number: 1423715-09-6

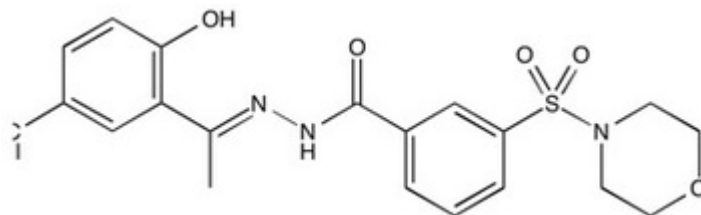
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to at least 25 mg/ml)

Storage: -20°C

Stability: ≥ 1 year.



Applications

LSD1 Inhibitor

Functions

SP2509 is a potent (IC₅₀ = 13 nM), reversible, non-competitive inhibitor of histone demethylase LSD1 (KDM1A), selective over the closely related flavin enzymes MAO A & B, lactate dehydrogenase, several CYPs, or hERG1. It inhibits growth and induces differentiation of cancer stem cells, e.g. AML progenitor cells, and promotes autophagy in neuroblastoma cells. It also causes cancer cell death independent of LSD1, possibly through downregulation of Bcl-2 and Mcl-1. Also inhibits HSV-1 infection by blocking viral DNA replication and gene expression.

Application Procedures

First dissolved in DMSO (up to at least 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.