

SP2509

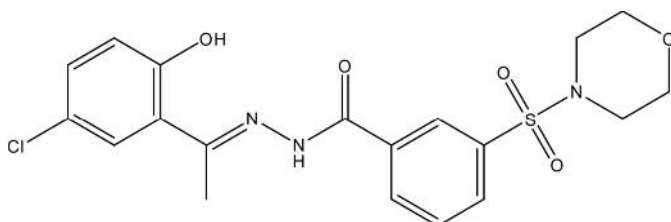
SYN-1212

(E)-N'-(1-(5-chloro-2-hydroxyphenyl)ethylidene)-3-(morpholinosulfonyl)benzohydrazide

CAS Registry No.: 1423715-09-6

Smiles String:

C1C=CC(/C(C)=N/NC(C2=CC(S(N3CCOC(C3)=O)=O)=CC=C2)=O)=C(O)C=C1



Molecular Weight: 437.90

Molecular Formula: C<sub>19</sub>H<sub>20</sub>ClN<sub>3</sub>O<sub>5</sub>S

Lot Number: Refer to vial

<sup>1</sup>H-NMR: Available on request

HPLC (Purity): > 95.0% @ 254 nm

ES-MS: Available on request

## Description:

LSD1 is a promising target for cancer therapy. Epigenetic control of histone methylation is frequently associated with oncogenesis and LSD1 is overexpressed in many types of cancer. siRNA knockdown of LSD1 has been shown to suppress growth of cancer cells. SP2509 is a selective and reversible LSD1 inhibitor with an IC<sub>50</sub> of 10nM. SP2509 demonstrates a high specificity for LSD1, with no effect on MAOi.

## Shipping and Storage Temperature

Shipping:  
Ambient

Storage (Powder):  
3 Months at -4C, >3 Years at -20C

Storage (DMSO Solution):  
1 Month at -4C, >3 Months at -80C

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## Solubility

Data Not Available

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## Preparing Stock Solutions

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.4379	4.379	8.758	21.895

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## References

1. Sorna V, Theisen ER, Stephens B, Warner SL, Bearss DJ, Vankayalapati H, Sharma S. High-throughput virtual screening identifies novel N'-(1-phenylethylidene)-benzohydrazides as potent, specific, and reversible LSD1 inhibitors. *J Med Chem*. 2013 Dec 12;56(23):9496-508. doi: 10.1021/jm400870h. Epub 2013 Nov 23. PubMed PMID: 24237195.
2. Fiskus W, Sharma S, Shah B, Portier BP, Devaraj SG, Liu K, Iyer SP, Bearss D, Bhalla KN. Highly effective combination of LSD1 (KDM1A) antagonist and pan-histone deacetylase inhibitor against human AML cells. *Leukemia*. 2014 Apr 4. doi: 10.1038/leu.2014.119. [Epub ahead of print] PubMed PMID: 24699304.
3. [http://www.pharmaconnections.com/Investment\\_Opps/Salarius\\_OLD/Salarius\\_Pharma\\_Non-Confidential.pdf](http://www.pharmaconnections.com/Investment_Opps/Salarius_OLD/Salarius_Pharma_Non-Confidential.pdf)

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## Ordering Information

To order more of this or any other SYNkinase compound, go to [synkinase.com](http://synkinase.com), Call us Toll Free (US Only) at 1- 877-854-6273 or email [orders@synkinase.com](mailto:orders@synkinase.com).

Product Datasheet (Rev. 1.1)