

## Product Data Sheet

Product Name: MS31  
Cat. No.: GC36657

### Chemical Properties

Cas. No. 2366264-12-0

SMILES NCC1=CC(CN)=C(OC)C(OCCCN2CC(C=CC=C3)=C3C2)=C1

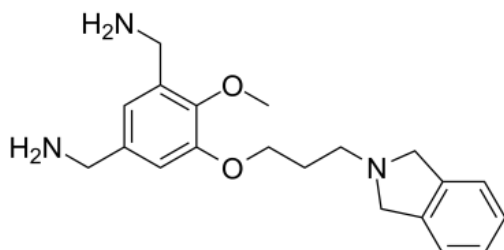
Formula  $C_{20}H_{27}N_3O_2$  M.Wt 341.45

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



### Background

MS31 is a potent, cell permeable, highly affinity, and highly selective fragment-like methyllysine reader protein spindlin 1 (SPIN1) inhibitor, which potently inhibits the interactions between SPIN1 and H3K4me3 (IC<sub>50</sub>=77 nM, AlphaLISA; 243 nM, FP). It selectively binds Tudor domain II of SPIN1 (K<sub>d</sub>=91 nM). MS31 potently inhibits binding of trimethyllysine-containing peptides to SPIN1, and is not toxic to nontumorigenic cells[1]. IC<sub>50</sub>: 77 nM (SPIN1 by AlphaLISA), 243 nM (SPIN1 by FP)[1]K<sub>d</sub>: 91 nM (SPIN1)[1]

**Caution: Product has not been fully validated for medical applications. For research use only.**

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MS31 potently inhibits binding of trimethyllysine-containing peptides to SPIN1, displays high binding affinity, is highly selective for SPIN1 over other epigenetic readers and writers, directly engages SPIN1 in cells, and is not toxic to nontumorigenic cells. MS31 selectively binds tudor domain II of SPIN1[1].

[1]. Xiong Y, et al. Discovery of a Potent and Selective Fragment-like Inhibitor of Methyllysine Reader Protein Spindlin 1 (SPIN1). J Med Chem. 2019 Jul 24.

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