

Product Name: DBZ

Catalog No.: 4489

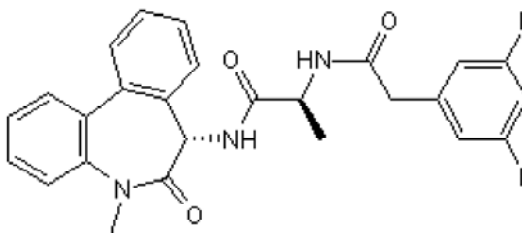
Batch No.: 3

CAS Number: 209984-56-5

IUPAC Name: *N*-[(1*S*)-2-[[[(7*S*)-6,7-Dihydro-5-methyl-6-oxo-5*H*-dibenz[*b,d*]azepin-7-yl]amino]-1-methyl-2-oxoethyl]-3,5-difluorobenzeneacetamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₆H₂₃F₂N₃O₃
Batch Molecular Weight: 463.48
Physical Appearance: White solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.25 (Ethyl acetate:Petroleum ether [7:3])
HPLC: Shows 99.4% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = -132.3 (Concentration = 1, Solvent = Methanol)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	67.38	5	9.07
Found	67.34	5.01	8.91

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Inhibitor of γ -secretase. Blocks Notch cleavage ($IC_{50} < 2$ nM) in a cell-based assay; inhibits the Notch pathway. Stimulates the formation of human iPSCs from human keratinocytes.

Physical and Chemical Properties:

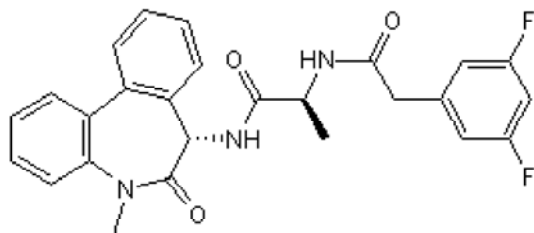
Batch Molecular Formula: $C_{26}H_{23}F_2N_3O_3$

Batch Molecular Weight: 463.48

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Ichida et al (2014) Notch inhibition allows oncogene-independent generation of iPS cells. *Nat.Chem.Biol.* **10** 632. PMID: 24952596.

Groth et al (2010) Pharmacological analysis of *Drosophila melanogaster* γ -secretase with respect to differential proteolysis of Notch and APP. *Mol.Pharmacol.* **77** 567. PMID: 20064975.

van Es et al (2005) Notch/ γ -secretase inhibition turns proliferative cells in intestinal crypts and adenomas into goblet cells. *Nature* **435** 959. PMID: 15959515.

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