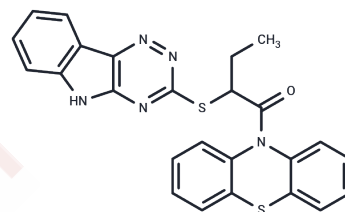


Inauhzin

Chemical Properties

CAS No. :	309271-94-1
Formula:	C ₂₅ H ₁₉ N ₅ O ₅ S ₂
Molecular Weight:	469.58
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Inauhzin (INZ)(INZ) is a novel small molecule that effectively reactivates p53 by inhibiting SIRT1 activity, promotes p53-dependent apoptosis of human Y cells without causing apparently genotoxic stress (IC ₅₀ =3 μM, in A549 cell).
Targets(IC ₅₀)	Sirtuin,MDM-2/p53
Kinase Assay	Kinase Profile Assay: Assays for serine/threonine kinases using radio labeled [γ- ³³ P] ATP are performed in 96 well plates. BRAF and c-RAF are expressed as N-terminal FLAG-tagged protein using a baculovirus expression system. The reaction conditions are optimized for each kinase: BRAF (25 ng/well of enzyme, 1 μg/well of GST-MEK1(K96R), 0.1 μCi/well of [γ- ³² P] ATP, room temperature, 20 min reaction); c-RAF (25 ng/well of enzyme, 1 μg/well of GST-MEK1 (K96R), 0.1 μCi/well of [γ- ³² P] ATP, room temperature, 20 min reaction). Enzyme reactions are performed in 25 mM HEPES, pH 7.5, 10 mM magnesium acetate, 1 mM dithiothreitol and 0.5 μM ATP containing optimized concentration of enzyme, substrate and radiolabeled ATP as described above in a total volume of 50 μL. Prior to the kinase reaction, compound and enzyme are incubated for 5 min at reaction temperature as described above. The kinase reactions are initiated by adding ATP. After the reaction period as described above, the reactions are terminated by the addition of 10% (final concentration) trichloroacetic acid. The [γ- ³³ P] or [γ- ³² P]-phosphorylated proteins are filtered in GFC filter plates with a Cell Harvester and then the plates are washed out with 3% phosphoric acid. The plates are dried, followed by the addition of 40 μL of MicroScint0. The radioactivity is counted by a TopCount scintillation counter.

Solubility Information

Solubility	DMSO: 45 mg/mL (95.83 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.26 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1296 mL	10.6478 mL	21.2956 mL
5 mM	0.4259 mL	2.1296 mL	4.2591 mL
10 mM	0.213 mL	1.0648 mL	2.1296 mL
50 mM	0.0426 mL	0.213 mL	0.4259 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Zhang Q, et al. EMBO Mol Med. 2012 Apr; 4(4): 298-31

Sun Y, Yang Y M, Hu Y Y, et al. Inhibition of nuclear deacetylase Sirtuin-1 induces mitochondrial acetylation and calcium overload leading to cell death. Redox Biology. 2022: 102334

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