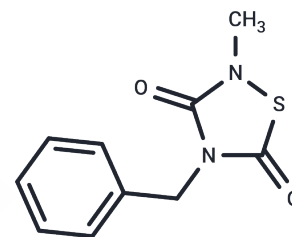


## TDZD-8

## Chemical Properties

CAS No. :	327036-89-5
Formula:	C <sub>10</sub> H <sub>10</sub> N <sub>2</sub> O <sub>2</sub> S
Molecular Weight:	222.26
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	TDZD-8 (NP 01139) is an inhibitor of GSK-3 $\beta$ , with an IC <sub>50</sub> of 2 $\mu$ M; minimal inhibitory effect observed on CDK1, casein kinase II, PKA and PKC.
Targets(IC50)	GSK-3
In vitro	TDZD-8 acts as a noncompetitive inhibitor of ATP or GS-1 binding. TDZD-8 shows no inhibition of PKA, PKC, Cdk-1/cyclin B or CK-II in kinase assays. [1] TDZD-8 specifically induces cell death of primary leukemia specimens. TDZD-8 ablates leukemia progenitor and stem cells. TDZD-8 treatment induces oxidative stress. TDZD-8 induces cell death with extremely rapid cell death kinetics showing loss of membrane integrity. TDZD-8 inhibits PKC and FLT3 in primary AML specimens. [2]

## Solubility Information

Solubility	H <sub>2</sub> O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 70 mg/mL (314.95 mM),Sonication is recommended. Ethanol: 44.5 mg/mL (200.22 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 (9 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	4.4992 mL	22.4962 mL	44.9924 mL
5 mM	0.8998 mL	4.4992 mL	8.9985 mL
10 mM	0.4499 mL	2.2496 mL	4.4992 mL
50 mM	0.090 mL	0.4499 mL	0.8998 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

Martinez A, et al. J Med Chem, 2002, 45(6), 1292-1299.

Guzman ML, et al. Blood, 2007, 110(13), 4436-4444.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481