



TDZD-8

Cat. No.:	OB0225WX-2141
Appearance:	Solid
Purity:	≥99%
Identity:	Confirmed by NMR, and LC-MS.
Size:	5 mg; 10 mg; 25 mg; 50 mg; 100 mg

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	TDZD-8 is a glycogen synthase kinase 3 β (GSK-3 β) inhibitor with an IC ₅₀ of 2 μ M, displaying negligible inhibitory activity against PKA, PKC, CDK1, and Casein kinase II.
Synonym	GSK-3 β Inhibitor I; NP 01139; 327036-89-5; 4-Benzyl-2-methyl-1,2,4-thiadiazolidine-3,5-dione; GSK-3 β Inhibitor I; MFCD04973552; 1,2,4-Thiadiazolidine-3,5-dione, 2-methyl-4-(phenylmethyl)-; 2-methyl-4-(phenylmethyl)-1,2,4-thiadiazolidine-3,5-dione; GSK-3 β Inhibitor I; NP 01139; TDZD 8; Thiadiazolidinone-8; TDZD8; GSK-3 β Inhibitor I; 4-Benzyl-2-methyl-[1,2,4]thiadiazolidine-3,5-dione
CAS No.	327036-89-5
Compound CID	4124851
Formula	C ₁₀ H ₁₀ N ₂ O ₂ S
Formula Weight	222.26

Specification

Targets&IC50	GSK-3 β : 2 μ M
Relative Density	1.375 g/cm ³
IUPAC Name	4-Benzyl-2-methyl-1,2,4-thiadiazolidine-3,5-dione
InChI	InChI=1S/C10H10N2O2S/c1-11-9(13)12(10(14)15-11)7-8-5-3-2-4-6-8/h2-6H,7H2,1H3
InChI Key	JDSJDASOXWCHPN-UHFFFAOYSA-N
SMILES string	CN1C(=O)N(C(=O)S1)CC2=CC=CC=C2



Stability	3 years in powder form.
Storage	Storage at -20°C.
Applications	TDZD-8 is utilized in neuropharmacology and inflammation research as a non-ATP competitive GSK-3 beta inhibitor to investigate its neuroprotective effects and its ability to reduce pro-inflammatory cytokine production.

Library Information

Target	GSK-3
Receptor	GSK-3 β
Pathways	Stem cells; PI3K/Akt/mTOR signaling
Plate Number	AOCL-28
Plate Location	d6
Empty Location	a1-h1; a12-h12
Container	96-well plate
Formulation	10mM DMSO
DMSO Max Solubility	70 mg/mL; 314.95 mM
Water Max Solubility	<1 mg/mL (insoluble or slightly soluble)
Ethanol Max Solubility	44.5 mg/mL; 200.21 mM