



LKT Laboratories, Inc.

TDZD-8

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lctlabs.com](mailto:getinfo@lctlabs.com)  
Web: [lctlabs.com](http://lctlabs.com)

## Product Information

**Product ID** T1298

**CAS No.** 327036-89-5

**Chemical Name** 4-Benzyl-2-methyl-1,2,4-thiadiazolidine-3,5-dione

**Synonym**

**Formula** C<sub>10</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>S

**Formula Wt.** 222.26

**Melting Point** 63-64.4 °C

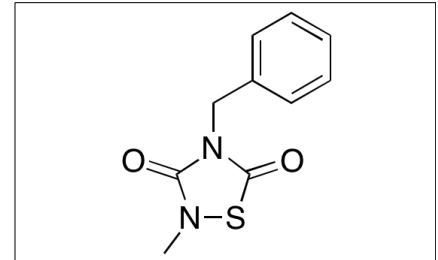
**Purity** ≥98%

**Solubility** Soluble in DMSO  
(18mg/mL).

**Store Temp** -20 °C

**Ship Temp** Ambient

**Description** TDZD-8 is an inhibitor of glycogen synthase kinase 3B (GSK-3B) that exhibits anti-inflammatory, anti-arthritic, and neuroprotective activities. TDZD-8 prevents hemorrhagic shock-induced changes in liver microcirculation and hepatocellular injury, inhibiting the inflammatory response and improving liver function in vivo. In rheumatoid arthritis synoviocytes, TDZD-8 decreases levels of p38 MAPK, ATF-2, c-jun, and JNK; in matched animal models, this compound decreases collagen-induced arthritis by inhibiting infiltration of T cells and macrophages as well as decreasing levels of IL-1B, IL-6, TNF-α, and IFN-γ. In other animal models, TDZD-8 improves deficits in spontaneous alternation in the Y-maze and changes in locomotor activity induced by amphetamines and viral-like immune activation.



**Bulk quantities available upon request**

Product ID	Size
T1298	5 mg
T1298	25 mg
T1298	100 mg
T1298	250 mg

**References** Jellestad L, Fink T, Pradarutti S, et al. Inhibition of glycogen synthase kinase (GSK)-3-β improves liver microcirculation and hepatocellular function after hemorrhagic shock. *Eur J Pharmacol.* 2014 Feb 5;724:175-84. PMID: 24389157.

Kwon YJ, Yoon CH, Lee SW, et al. Inhibition of glycogen synthase kinase-3β suppresses inflammatory responses in rheumatoid arthritis fibroblast-like synoviocytes and collagen-induced arthritis. *Joint Bone Spine.* 2013 Oct 28. [Epub ahead of print]. PMID: 24176738.

Willi R, Harmeier A, Giovanoli S, et al. Altered GSK3β signaling in an infection-based mouse model of developmental neuropsychiatric disease. *Neuropharmacology.* 2013 Oct;73:56-65. PMID: 23707483.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.