



# LKT Laboratories, Inc.

## Delta Sleep Inducing Peptide

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

### Product Information

Product ID D1643

CAS No. 62568-57-4

Chemical Name

H-Trp-Ala-Gly-Gly-Asp-Ala-Ser-Gly-Glu-OH

Synonym

Formula  $C_{35}H_{48}N_{10}O_{15}$

Formula Wt. 848.83

Melting Point

Purity  $\geq 95\%$

Solubility Soluble in water.

**Bulk quantities available upon request**

Product ID	Size
D1643	1 mg
D1643	2 mg
D1643	5 mg

Store Temp  $-20^{\circ}\text{C}$

Ship Temp Ambient

**Description** Delta sleep-inducing peptide exhibits anticonvulsant/antiepileptic and neuromodulatory activities. In vivo, this peptide decreases the incidence, severity, and duration of metaphit-induced seizures. Delta sleep-inducing peptide potentiates GABA currents and inhibits potentiation of NMDA currents in vivo. Additionally, this peptide exhibits hypoglycemia-like properties in other animal models, inhibiting non-enzymatic glycosylation of hemoglobin and decreasing protein oxidation. In myoleukemia cells, delta sleep-inducing peptide decreases expression of HSP70.

**References** Bondarenko TI, Sorokina IA, Mayboroda EA, et al. Effect of delta sleep-inducing peptide on oxidative modification of proteins in rat tissues and blood during physiological aging. *Bull Exp Biol Med.* 2012 Jul;153(3):371-4. PMID: 22866315.

Nurbakov AA, Mikhaleva II, Sapozhnikov AM. Effect of delta-sleep-inducing peptide on expression of heat shock protein 70 kDa in K562 cells. *Bull Exp Biol Med.* 2009 Jan;147(1):39-41. PMID: 19526126.

Grigor'ev VV, Ivanova TA, Kustova EA, et al. Effects of delta sleep-inducing peptide on pre- and postsynaptic glutamate and postsynaptic GABA receptors in neurons of the cortex, hippocampus, and cerebellum in rats. *Bull Exp Biol Med.* 2006 Aug;142(2):186-8. PMID: 17369935.

Stanojlović OP, Zivanović DP, Mirković SD, et al. Antiepileptic activity of delta sleep-inducing peptide and its analogue in metaphit-provoked seizures in rats. *Seizure.* 2005 Jun;14(4):240-7. PMID: 15911358.

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