
Product Data Sheet

Product Name: Terlipressin

Cat. No.: GC32463

Chemical Properties

Cas. No. 14636-12-5

SMILES Gly-Gly-Gly-Cys-Tyr-Phe-Gln-Asn-Cys-Pro-Lys-Gly-NH₂ (Disulfide bridge: Cys4-Cys9)Formula C₅₂H₇₄N₁₆O₁₅S₂

M.Wt 1227.37

Solubility DMSO : ≥ 12.3 mg/mL (10.02 mM)

Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

Terlipressin is a prodrug form of the vasopressin peptide lysipressin and a partial agonist of the vasopressin V_{1A} receptor ($K_i = 0.85 \mu\text{M}$).¹ It is also an agonist of vasopressin V_{1B} and V₂ receptors (K_i s = 1.11 and 1.58 μM , respectively). It increases mean arterial pressure (MAP) and decreases mortality in a rat model of uncontrolled hemorrhagic shock when administered at a dose of 15 $\mu\text{g}/\text{kg}$.² Terlipressin (2.6 $\mu\text{g}/\text{kg}$ per hour), in combination with norepinephrine, improves vascular reactivity and increases survival time in a rat model of cecal ligation and puncture-induced septic shock and a rabbit model of LPS-induced septic shock.³ It also increases MAP in a rat model of liver cirrhosis with portal hypertension, arterial hypotension, high cardiac output, and low systemic vascular resistance.⁴

1. Colson, P.H., Virsolvy, A., Gaudard, P., et al. Terlipressin, a vasoactive prodrug recommended in hepatorenal syndrome, is an agonist of human V₁, V₂ and V_{1B} receptors: Implications for its safety profile *Pharmacol. Res.* 113(Pt A)257-264(2016)

Caution: Product has not been fully validated for medical applications. For research use only.

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2.Lee, C.C., Lee, M.T., Chang, S.S., et al.A comparison of vasopressin, terlipressin, and lactated ringers for resuscitation of uncontrolled hemorrhagic shock in an animal modelPLoS One9(4)e95821(2014) 3.Xiao, X., Zhu, Y., Zhen, D., et al.Beneficial and side effects of arginine vasopressin and terlipressin for septic shockJ. Surg. Res.195(2)568-579(2015) 4.Fernández-Varo, G., Oró, D., Cable, E.E., et al.Vasopressin 1a receptor partial agonism increases sodium excretion and reduces portal hypertension and ascites in cirrhotic ratsHepatology63(1)207-216(2016)

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