



LKT Laboratories, Inc.

## Endomorphin-2

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### Product Information

Product ID E5211

CAS No. 141801-26-5

Chemical Name

Synonym

Formula  $C_{32}H_{37}N_5O_5$

Formula Wt. 571.68

Melting Point

Purity  $\geq 95\%$

Solubility Soluble in water (0.4 mg/mL).

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

Ship Temp Ambient

**Description** Endomorphin-2 is an endogenous agonist at  $\mu$ -opioid receptors ( $\mu$ ORs) in the spinal cord; it exhibits antinociceptive/analgesic, immunosuppressive, and pro-angiogenic activities. Endomorphin-2 increases pain thresholds in animal models of thermal pain and inhibits the formation of antibodies in other cellular models. In HUVECs, this peptide stimulates proliferation, migration, adhesion, and tube formation.

H-Tyr-Pro-Phe-Phe-NH<sub>2</sub>

**Bulk quantities available upon request**

Product ID	Size
E5211	5 mg
E5211	10 mg
E5211	25 mg

**References** Liu NJ, Gintzler AR. Spinal endomorphin 2 antinociception and the mechanisms that produce it are both sex- and stage of estrus cycle-dependent in rats. *J Pain*. 2013 Nov;14(11):1522-30. PMID: 24084000.

Dai X, Song HJ, Cui SG, et al. The stimulative effects of endogenous opioids on endothelial cell proliferation, migration and angiogenesis in vitro. *Eur J Pharmacol*. 2010 Feb 25;628(1-3):42-50. PMID: 19932695.

Anton B, Leff P, Calva JC, et al. Endomorphin 1 and endomorphin 2 suppress in vitro antibody formation at ultra-low concentrations: anti-peptide antibodies but not opioid antagonists block the activity. *Brain Behav Immun*. 2008 Aug;22(6):824-32. PMID: 18374539.

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