



LKT Laboratories, Inc.

## Pep-1 Peptide

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### Product Information

Product ID P1764

CAS No.

Chemical Name

Synonym

Formula  $C_{136}H_{195}N_{35}O_{33}$

Formula Wt. 2848.23

Melting Point

Purity  $\geq 95\%$

Solubility

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

Ship Temp Ambient

**Description** Pep-1 is a cell-penetrating peptide used to carry large conjugated structures across cell membranes. Pep-1 inhibits low molecular weight hyaluronan binding to toll-like receptor 4 (TLR4) and other receptors. Pep-1 also decreases intestinal and colonic length, decreases expression of IGF-1 and epiregulin, and decreases intestinal epithelial cell proliferation in vivo.

H-Lys-Glu-Thr-Trp-Trp-Glu-  
Thr-Trp-Trp-Thr-Glu-Trp-Ser-  
Gln-Pro-Lys-Lys-Lys-Arg-Lys-  
Val-OH

**Bulk quantities available upon request**

Product ID	Size
P1764	0.5 mg
P1764	1 mg
P1764	2.5 mg

**References** Meloni BP, Craig AJ, Milech N, et al. The Neuroprotective Efficacy of Cell-Penetrating Peptides TAT, Penetratin, Arg-9, and Pep-1 in Glutamic Acid, Kainic Acid, and In Vitro Ischemia Injury Models Using Primary Cortical Neuronal Cultures. *Cell Mol Neurobiol.* 2013 Nov 9. [Epub ahead of print]. PMID: 24213248.

Thaete LG, Qu XW, Jilling T, et al. Impact of toll-like receptor 4 deficiency on the response to uterine ischemia/reperfusion in mice. *Reproduction.* 2013 Apr 29;145(5):517-26. PMID: 23509372.

Riehl TE, Ee X, Stenson WF. Hyaluronic acid regulates normal intestinal and colonic growth in mice. *Am J Physiol Gastrointest Liver Physiol.* 2012 Aug 1;303(3):G377-88. PMID: 22556141.

Bobone S, Piazzon A, Orioni B, et al. The thin line between cell-penetrating and antimicrobial peptides: the case of Pep-1 and Pep-1-K. *J Pept Sci.* 2011 May;17(5):335-41. PMID: 21294230.

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