



Product Information

Product ID T8020

CAS No. 9063-57-4

Chemical Name

Synonym

Formula $C_{21}H_{40}N_8O_6$

Formula Wt. 500.6

Melting Point

Purity $\geq 95\%$

Solubility Soluble in water, DMSO.

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

Ship Temp Ambient

Description Tuftsin is a tetrapeptide that binds the neuropilin-1 (Nrp1) receptor, modulating TGF- β , cGMP, and Ca^{2+} signaling. Tuftsin is derived from the Fc region of IgG. Tuftsin exhibits immunomodulatory activity, inducing leukocytes to become cytotoxic effector cells and stimulating phagocytosis in macrophages and microglia in cellular models. Tuftsin also displays anticancer chemotherapeutic benefit, enhancing the effects of co-administered chemotherapeutic compounds. In animal models, tuftsin also inhibits withdrawal-associated behaviors.

H-Thr-Lys-Pro-Arg-OH

Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
T8020	5 mg	\$63.00
T8020	10 mg	\$107.00
T8020	25 mg	\$189.00

References Nissen JC, Selwood DL, Tsirka SE. Tuftsin signals through its receptor neuropilin-1 via the transforming growth factor beta pathway. *J Neurochem.* 2013 Nov;127(3):394-402. PMID: 24033337.

Aronowski J, Wleklík M, Gumulka SW, et al. Modification of morphine withdrawal: effect of tuftsin, [Lys4]-tuftsinyltuftsin, tetrapeptide fragment (1-4) of substance P and its amide. *Life Sci.* 1985 Oct 28;37(17):1649-53. PMID: 2414628.

Nishioka K, Babcock GF, Phillips JH, et al. Antitumor effect of tuftsin. *Mol Cell Biochem.* 1981 Dec 4;41:13-8. PMID: 6895773.

Stabinsky Y, Bar-Shavit Z, Fridkin M, et al. On the mechanism of action of the phagocytosis-stimulating peptide tuftsin. *Mol Cell Biochem.* 1980 Apr 18;30(2):71-7. PMID: 6247642.

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