PRODUCT INFORMAT



Xenopsin Item No 29968

11em No. 2770	0	¹² 11	
CAS Registry No.:	51827-01-1		
Formal Name:	5-oxo-L-prolylglycyl-L-lysyl-L-arginyl-L-		NH ₂
	prolyl-L-tryptophyl-L-isoleucyl-L-leucine		
Synonym:	pGlu-Gly-Lys-Arg-Pro-Trp-Ile-Leu		
MF:	C ₄₇ H ₇₃ N ₁₃ O ₁₀		$\langle \downarrow \rangle$ $\downarrow \rangle$ $\downarrow $ $\downarrow $ $\downarrow $ $\downarrow $
FW:	980.2		
Purity:	≥98%		
UV/Vis.:	λ _{max} : 219 nm		у—н Ог Сон
Supplied as:	A crystalline solid		
Storage:	-20°C		
Stability:	≥4 years		

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Xenopsin is supplied as a crystalline solid. A stock solution may be made by dissolving the xenopsin in water. The solubility of xenopsin in water is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Xenopsin is a neurotensin-like octapeptide that has been found in X. laevis skin.¹ It inhibits neurotensin (Item No. 24717) binding to rat brain synaptic membranes (K_i = 1.5 nM) and induces contraction of isolated guinea pig ileum in the presence of neostigmine (Item No. 23501; EC50 = 9 nM).² Xenopsin (0.1 μ M) increases the firing rate of dopaminergic neurons in rat substantia nigra slices by 58.5%.³ Intravenous infusion of xenopsin (2 µg/kg per hour) increases adrenal, pancreatic, and ileal blood flow and plasma levels of pancreatic polypeptide, glucagon, substance P, and cortisol, as well as reduces tetragastrin-induced gastric acid secretion in dogs.¹

References

- 1. Zinner, M.J., Kasher, F., Modlin, I.M., et al. Effect of xenopsin on blood flow, hormone release, and acid secretion. Am. J. Physiol. 243(3), G195-199 (1982).
- 2. Granier, C., van Rietschoten, J., Kitabgi, P., et al. Synthesis and characterization of neurotensin analogues for structure/activity relationship studies. Acetyl-neurotensin-(8--13) is the shortest analogue with full binding and pharmacological activities. Eur. J. Biochem. 124(1), 117-124 (1982).
- 3. Pozza, M.F., Küng, E., Bischoff, S., et al. The neurotensin analog xenopsin excites nigral dopamine neurons. Eur. J. Pharmacol. 145(3), 341-343 (1988).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/25/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM