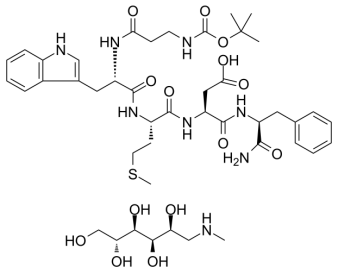
Pentagastrin meglumine

Cat. No.:	HY-A0261A
CAS No.:	57448-84-7
Molecular Formula:	$C_{44}H_{66}N_8O_{14}S$
Molecular Weight:	963.11
Target:	Cholecystokinin Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Pentagastrin (ICI-50123) meglumine is a potent, selective Cholecystokinin B (CCK_B) receptor antagonists with IC_{50} values of 11 nM and 1100 nM for CCK_B and CCK_A, respectively. Pentagastrin meglumine enhances gastric mucosal defense mechanisms against acid and protects the gastric mucosa from experimental injury[1].[2].
In Vitro	Pentagastrin (ICI-50123) meglumine (0.1-100 μM; GH_3-cells) increases intracellular Ca^{2+} in a dose-dependent manner with a maximal increase of 2.77-fold[1]. Pentagastrin (ICI-50123) meglumine (0.1-100 μM; GH_3-cells) bounds dose dependently to GH3 cells[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Pentagastrin (ICI-50123) meglumine (80 μg/kg/h; i.v.; male Sprague-Dawley rats) protects rat gastric mucosa from acidified aspirin injury[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Sprague-Dawley rats[2]
Dosage:	80 μg/kg/h
Administration:	Intravenous injection
Result:	Protected rat gastric mucosa from acidified aspirin injury. Induced a hyperaemic response to luminal acid challenge, increased mucus gel thickness, and elevated pH_i during acid challenge.

CUSTOMER VALIDATION

- Front Mol Biosci. 2021 May 17;8:661424.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Smith AJ, et al. Characterisation of CCKB receptors on GH3 pituitary cells: receptor activation is linked to Ca2+ mobilisation. Eur J Pharmacol. 1994 Apr 15;267(2):215-23.

[2]. Tanaka S, et al. Pentagastrin gastroprotection against acid is related to H2 receptor activation but not acid secretion. Gut. 1998 Sep;43(3):334-41.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA