[Des-His1,Glu9] Glucagon

Cat. No.:	HY-P3608
CAS No.:	110121-11-4
Molecular Formula:	$C_{148}H_{220}N_{40}O_{48}S$
Molecular Weight:	3359.63
Sequence Shortening:	SQGTFTSEYSKYLDSRRAQDFVQWLMNT
Target:	GCGR
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description

[Des-His1,Glu9] Glucagon is a potent glucagon receptor system peptide antagonist. [Des-His1,Glu9] Glucagon enhances the glucose-stimulated release of insulin from pancreatic islet cells. [Des-His1,Glu9] Glucagon can be used to research diabetes [1].

IC_{50} & Target

Glucagon Receptor[1]

In Vitro

[Des-His1,Glu9] Glucagon (1 pM-100 μM) does not activate membrane-bound adenylate cyclase up to a concentration of 2×10^{-4} molar in the cAMP assay on isolated rat liver membranes (from male Sprague Dawley rats)[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

[Des-His1,Glu9] Glucagon (3.6-4.0 μg/kg for rabbits, 1 mg/kg for rats; i.v.; single dosage) suppresses hyperglycemic effects in rabbits and rats[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	New Zealand rabbits (2.8-3.8 kg; fasted for 18 hours)[1]
Dosage:	3.6-4.0 μg/kg
Administration:	i.v.; single dosage
Result:	Suppressed hyperglycemic response of glucagon.

Animal Model:	Male Wistar rats weighing [350-400 mg; hyperglycemia induced by i.p. injection of 65 mg/kg Streptozotocin (HY-13753)][1]
Dosage:	1 mg/kg
Administration:	Intravenously administration through the tail vein; single dosage
Result:	Decreased blood glucose rapidly, and reduced hyperglycemic effect by 70% within 5 min.

REFERENCES

[1]. Unson CG, et al. Biological activities of des-His1[Glu9]glucagon amide, a glucagon antagonist. Peptides. 1989 Nov-Dec;10(6):1171-7.

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