

Product Name : Glucagon hydrochloride

Synonyms : Porcine glucagon hydrochloride

Cat No. : M22689

CAS Number : 28270-04-4

Molecular Formula : C153H225N43O49S.ClH

Formula Weight : 3519.21

Chemical Name : —

Description : Glucagon hydrochloride is a peptide hormone, produced by pancreatic α -cells. It activates HNF4 α and increases HNF4 α phosphorylation. Glucagon hydrochloride stimulates gluconeogenesis. Glucagon stimulates both hepatic kisspeptin1 production and gluconeogenesis. Upon binding to its receptor Gcgr, Glucagon activates cAMP-PKA signaling to stimulate hepatic glucose production (HGP) and cause hyperglycemia. Glucagon (100 nM) increases the phosphorylation of HNF4 α . Glucagon (100 nM) represses CYP7A1 mRNA expression in human primary hepatocytes. Glucagon (20 μ g/kg) increases glycemia and does not stimulate insulin secretion in ambient-fed mice. High-dose (1 mg/kg) Glucagon lowers glycemia compared with PBS control and stimulates insulin secretion in ambient-fed mice.

Pathway : Others

Target : Other Targets

Receptor : glucocorticoid receptor

Solubility : —

SMILES : Cl.CSCCC[C@H](NC(=O)[C@H](CC(C)C)NC(=O)[C@H](Cc1c[nH]c2cccc12)NC(=O)[C@H](CCC(N)=O)NC(=O)[C@@H](NC(=O)[C@H](Cc1cccc1)NC(=O)[C@H](CC(O)=O)NC(=O)[C@H](CCC(N)=O)NC(=O)[C@H](CCCNC(N)=N)NC(=O)[C@H](CCCNC(N)=N)NC(=O)[C@H](CO)NC(=O)[C@H](CC(O)=O)NC(=O)[C@H](CC(C)C)NC(=O)[C@H](Cc1ccc(O)cc1)NC(=O)[C@H](CCCCN)NC(=O)[C@H](CO)NC(=O)[C@H](Cc1ccc(O)cc1)NC(=O)[C@H](CC(O)=O)NC(=O)[C@H](CO)NC(=O)[C@@H](NC(=O)[C@H](Cc1cccc1)NC(=O)[C@@H](NC(=O)CNC(=O)[C@H](CCC(N)=O)NC(=O)[C@H](CO)NC(=O)[C@@H](N)Cc1cnc[nH]1)[C@@H](CO)[C@@H](C)O)C(=O)N[C@@H](CC(N)=O)C(=O)N[C@@H]([C@@H](C)O)C(=O)O

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Song WJ, et al. Glucagon regulates hepatic kisspeptin to impair insulin secretion. Cell Metab. 2014 Apr 1;19(4):667-81.