GCGR Protein, Human (HEK293, N-His, C-Myc)

Cat. No.:	HY-P700411
Synonyms:	glucagon receptor; GGR; GL-R; FLJ97182; MGC138246;
Species:	Human
Source:	HEK293
Accession:	P47871 (A26-K136)
Gene ID:	2642
Molecular Weight:	Approximately 35 kDa

PROPERTIES

AA Sequence	A Q V M D F L F E K W K L Y G D Q C H H N L S L L P P P T E L V C N R T F D K Y S C W P D T P A N T T A N I S C P W Y L P W H H K V Q H R F V F K R C G P D G Q W V R G P R G Q P W R D A S Q C Q M D G E E I E V Q K E V A K
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized human GCGR at 2 μg/mL can bind Anti-GCGR recombinant antibody, the EC_{50} is <6.666 ng/mL.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The GCGR Protein serves as a G-protein coupled receptor for glucagon, playing a pivotal role in the regulation of blood glucose levels and glucose homeostasis. It actively regulates hepatic glucose production by promoting glycogen hydrolysis and gluconeogenesis, making it a key mediator of responses to fasting. Upon ligand binding, the receptor undergoes a conformational change that initiates signaling via guanine nucleotide-binding proteins (G proteins), subsequently modulating downstream effectors such as adenylate cyclase. This modulation results in the activation of adenylate cyclase. Furthermore, the receptor contributes to signaling via a phosphatidylinositol-calcium second messenger system, underscoring its multifaceted role in glucose regulation.

Caution: Product has not been fully validated for medical applications. For research use only.

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