

GRM5 Protein, Human (His)

Cat. No.:	HY-P701627
Synonyms:	GRM5; Metabotropic glutamate receptor 5; mGluR5
Species:	Human
Source:	Sf9 insect cells
Accession:	P41594
Gene ID:	2915
Molecular Weight:	

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 µm filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	<p>The GRM5 Protein functions as a G-protein coupled receptor for glutamate, undergoing a conformational change upon ligand binding that initiates signaling through guanine nucleotide-binding proteins (G proteins), ultimately modulating downstream effectors. This signaling cascade activates a phosphatidylinositol-calcium second messenger system and generates a calcium-activated chloride current. Integral to the regulation of synaptic plasticity and modulation of neural network activity, GRM5 plays a crucial role in shaping the dynamic responses of the central nervous system. The interaction of the PPXXF motif with HOMER1, HOMER2, and HOMER3 highlights its involvement in intracellular signaling events. Additionally, GRM5 interacts with SIAH1, RYR1, RYR2, ITPR1, SHANK1, SHANK3, TAMALIN, and NCDN, with isoform 2 specifically interacting with NECAB2. Further interaction occurs with CAMK2A, emphasizing the intricate network through which GRM5 contributes to the regulation of neural function.</p>
------------	---

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