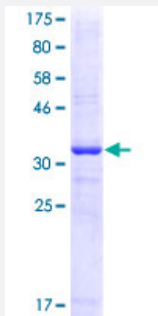


GRM1 (Human) Recombinant Protein (Q01)

Catalog # H00002911-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human GRM1 partial ORF (NP_000829, 387 a.a. - 486 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	NPNFKRICTGNESLEENYVQDSKMGFVINAYAMAHGLQNMHHALCPGHVGLCDAMKPIDGSKLL DFLIKSSFIGVSGEEVWFDEKGDAPGRYDIMNLQY
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.74
Interspecies Antigen Sequence	Mouse (95)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — GRM1

Entrez GeneID [2911](#)

GeneBank Accession# [NM_000838](#)

Protein Accession# [NP_000829](#)

Gene Name GRM1

Gene Alias GPRC1A, GRM1A, MGLUR1, MGLUR1A, mGlu1

Gene Description glutamate receptor, metabotropic 1

Omim ID [604473](#)

Gene Ontology [Hyperlink](#)

Gene Summary L-glutamate is the major excitatory neurotransmitter in the central nervous system and activates both ionotropic and metabotropic glutamate receptors. Glutamatergic neurotransmission is involved in most aspects of normal brain function and can be perturbed in many neuropathologic conditions. The metabotropic glutamate receptors are a family of G protein-coupled receptors, that have been divided into 3 groups on the basis of sequence homology, putative signal transduction mechanisms, and pharmacologic properties. Group I includes GRM1 and GRM5 and these receptors have been shown to activate phospholipase C. Group II includes GRM2 and GRM3 while Group III includes GRM4, GRM6, GRM7 and GRM8. Group II and III receptors are linked to the inhibition of the cyclic AMP cascade but differ in their agonist selectivities. The canonical alpha isoform of the metabotropic glutamate receptor 1 gene is a disulfide-linked homodimer whose activity is mediated by a G-protein-coupled phosphatidylinositol-calcium second messenger system. Alternative splicing results in multiple transcript variants encoding distinct isoforms; some of which may have distinct functions. [provided by RefSeq]

Other Designations OTTHUMP00000017365

Pathway

- [Calcium signaling pathway](#)
- [Gap junction](#)
- [Long-term depression](#)
- [Long-term potentiation](#)
- [Neuroactive ligand-receptor interaction](#)

Disease

- [Cardiovascular Diseases](#)
- [Cognition](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Tobacco Use Disorder](#)
- [Weight Gain](#)