

Product Information

MemDX™ Membrane Protein Human GRIA2 (Glutamate ionotropic receptor AMPA type subunit 2) Expressed in *E.coli* with 10xHis tag at the N-terminus, Myc tag at the C-terminus for Antibody Discovery, Partial (25-543aa)

Cat. No.: **MPX4203K**

This product is for research use only and is not intended for diagnostic use.

This product is a 63.3 kDa Human GRIA2 membrane protein expressed in *E.coli*. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

GRIA2

Protein Length

Partial (25-543aa)

Protein Class

Transporter; Ion channel

Molecular Weight

63.3 kDa

TMD

4

Sequence

NSIQIGGLFPRGADQEYSAFRVGMVQFSTSEFRLTPHIDNLEVANSFAVTNAFCSQFSRGVYAIFGFYDKKSVNTITSFCGTLHVSFI

Product Description

Expression Systems

E.coli

Tag

10xHis tag at the N-terminus, Myc tag at the C-terminus

Protein Format

Soluble

Form

Liquid or Lyophilized powder

Purity

>85% as determined by SDS-PAGE.

Buffer

Tris/PBS-based buffer, 6% Trehalose, pH 8.0

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target**Target Protein**

GRIA2

Full Name

Glutamate ionotropic receptor AMPA type subunit 2

Introduction

Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. This gene product belongs to a family of glutamate receptors that are sensitive to alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA), and function as ligand-activated cation channels. These channels are assembled from 4 related subunits, GRIA1-4. The subunit encoded by this gene (GRIA2) is subject to RNA editing (CAG->CGG; Q->R) within the second transmembrane domain, which is thought to render the channel impermeable to Ca(2+). Human and animal studies suggest that pre-mRNA editing is essential for brain function, and defective GRIA2 RNA editing at the Q/R site may be relevant to amyotrophic lateral sclerosis (ALS) etiology. Alternative splicing, resulting in transcript variants encoding different isoforms, (including the flip and flop isoforms that vary in their signal transduction properties), has been noted for this gene.

Alternative Names

Glutamate receptor 2; AMPA-selective glutamate receptor 2; glutamate receptor, ionotropic, AMPA 2; GRIA2; Glutamate ionotropic receptor AMPA type subunit 2

Gene ID

[2891](#)

UniProt ID

[P42262](#)