

Product datasheet for TP326253

GRIA1 (NM_001114183) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human glutamate receptor, ionotropic, AMPA 1 (GRIA1), transcript variant 2, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC226253 representing NM_001114183 Red =Cloning site Green =Tags(s)

MQHIFAFFCTGFLGAVGANFPNNIQIGGLFPNQSQEHAAFRALSQLEPPKLLPQIDIVNISDSFEM
TYRFCSQFSKGVYAIFGFYERRTVNMLTSFCGALHVCFITPSFPVDTSNQFVLQLRPELQDALISIIDHY
KWQKFVYIYDADRGLSVLQKVLDTAAEKNWQVTAVNILLTTEEGYRMLFQDLEKKERLVVWDCESERLN
AILGQIIKLEKNGIGYHYILANLGFMDIDLNKFESGANVTGFQLVNYTDTIPAKIMQQWKNSDARDHTR
VDWKRPKYTSALTYDGVKVMAEAFQSLRRQRIDISRRGNAGDCLANPAVPWGGQIDIQRALQQVRFEGLT
GNVQFNEKGRRTNYTLHVIEMKHDGIRKIGYWNEDDKFVPAATDAQAGGDNSSVQNRTYIVTTILEDPYV
MLKKNANQFEGNDRYEGYCVELAAEIAKHVGYSYRLEIVSDGKYGARDPDTKAWNGMVGELVYGRADVA
V
APLTITLVREEVIDFSKPFMSLGISIMIKKPQKSKPGVFSFLDPLAYEIWMCIVFAYIGVSVVFLVLSRF
SPYEWHSSEFEGRDQTTSDQSNEFGIFNSLWFSLGAFMQGCDISPRSLSGRIVGGVWWFFTLIISSY
TANLAAFLTVERMVSPIESAEDLAKQTEIAYGTLEAGSTKEFFRRSKIIVFEKMWTYMKAEPSVFRRT
EEGMIRVRKSKGKYAYLLESTMNEYIEQRKPCDTMKVGGNLDKSGYGIATPKGSALRGPVNLAVLKLSEQ
GVLDKLKSWWWYDKGECGSKDSGSKDKTSALSLSNVAGVFYILIGGLGLAMLVALIEFCYKSRSESKRMK
GFCLIPQQSINEAIRTSTLPRNSGAGASSGGSGENGRVSHDFPKSMQSIPCMSSHSSGMPLGATGL

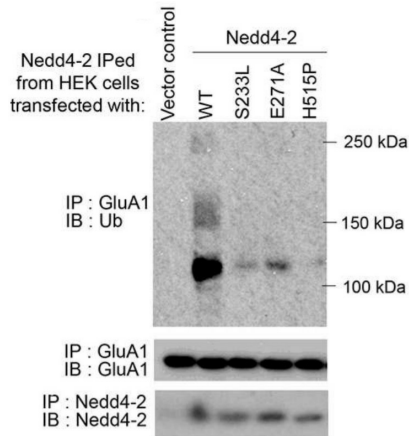
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	101.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

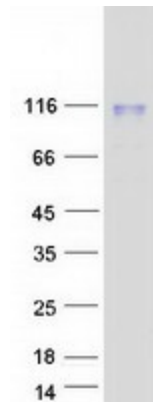


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Bioactivity:	In vitro ubiquitination assay substrate (PMID: 28212375) In vitro ubiquitination assay substrate (PMID: 29771335)
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_001107655
Locus ID:	2890
UniProt ID:	P42261
Cytogenetics:	5q33.2
RefSeq ORF:	2718
Synonyms:	GluA1; GLUH1; GLUR1; GLURA; HBGR1
Summary:	Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. These receptors are heteromeric protein complexes with multiple subunits, each possessing transmembrane regions, and all arranged to form a ligand-gated ion channel. The classification of glutamate receptors is based on their activation by different pharmacologic agonists. This gene belongs to a family of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA) receptors. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
Protein Families:	Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane
Protein Pathways:	Amyotrophic lateral sclerosis (ALS), Long-term depression, Long-term potentiation, Neuroactive ligand-receptor interaction

Product images:


Three epilepsy-associated missense mutations (S233L, E271A, H515P) of Nedd4-2 reduce GluA1 ubiquitination. Western blots of Ub and GluA1 after immunoprecipitation with anti-GluA1 antibody following in vitro ubiquitination with recombinant GluA1 (OriGene TP326253). HA-tagged wild-type (WT) or mutant Nedd4-2s used for in vitro ubiquitination were obtained from HEK cells transfected with one of the Nedd4-2s followed by immunoprecipitation with an anti-Nedd4-2 antibody. Figure cited from PLoS Genet, PMID: 28212375



Coomassie blue staining of purified GRIA1 protein (Cat# TP326253). The protein was produced from HEK293T cells transfected with GRIA1 cDNA clone (Cat# [RC226253]) using MegaTran 2.0 (Cat# [TT210002]).