

Rat AMPA receptor (Glutamate receptor 1) ELISA Kit | AMPA elisa kit

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CATALOG #
AAA249836

REACTIVITY
Rat

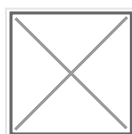
PRODUCT SYNONYMS

AMPA receptor (Glutamate receptor 1); Rat AMPA receptor (Glutamate receptor 1) ELISA Kit; Glutamate receptor 1; GluR-1; AMPA-selective glutamate receptor 1; GluR-A; GluR-K1; Glutamate receptor ionotropic; AMPA 1; GluA1; Gria1; Glur1; AMPA receptor; AMPA elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	Specifically recognize AMPA receptor, no obvious cross reaction with other analogues
Assay Type	Sandwich
Samples	Cell lysates, tissue homogenates and other biological samples
Detection Range	78.125-5000pg/ml
Sensitivity	46.875pg/ml
Intra-assay Precision	Intra-assay Precision: samples with low, medium and high concentration are tested 20 times on same plate.
Inter-assay Precision	Inter-assay Precision: samples with low, medium and high concentration are tested 20 times on three different plates.
Preparation and Storage	Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for AMPA elisa kit

Background: AMPA receptors (AMPArs) are comprised of four subunits (GluR 1-4), which assemble as homo- or heterotetramers to mediate the majority of fast excitatory transmissions in the central nervous system. GluR 1 is necessary for expression of long-term potentiation (LTP) in the hippocampus and formation of short-term memory. Hippocampal GluR 1 is also involved in morphine-induced adaptive synaptic mechanisms.

Principle of the Assay: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti AMPA receptor antibody was pre-coated onto the 96-well plate. The biotin conjugated anti AMPA receptor antibody was used as the detection antibody. The standards and pilot samples were added to the wells subsequently. After incubation, unbound conjugates were removed by wash buffer. Then, biotinylated detection antibody was added to bind with AMPA receptor conjugated on coated antibody. After washing off unbound conjugates, HRP-Streptavidin was added. After a third washing, TMB substrates were added to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that turned yellow after adding a stop solution. Read the O.D. absorbance at 450nm in a microplate reader. The concentration of AMPA receptor in the sample was calculated by drawing a standard curve. The concentration of the target substance is proportional to the OD450 value.

NCBI AND UNIPROT INFORMATION

NCBI GI #	29789269
NCBI GeneID	50592
NCBI Accession #	NP_113796.1
NCBI GenBank Nucleotide #	NM_031608.1
UniProt Accession #	P19490
Molecular Weight	101,555 Da
NCBI Official Full Name	glutamate receptor 1
NCBI Official Synonym Full Names	glutamate receptor, ionotropic, AMPA 1
NCBI Official Symbol	Gria1
NCBI Official Synonym Symbols	GluA1; gluR-A
NCBI Protein Information	glutamate receptor 1; AMPA-selective glutamate receptor 1; GluR1; gluR-1; gluR-K1; glutamate receptor A; glutamate receptor subunit GluR1; glutamate receptor, ionotropic, AMPA1 (alpha 1)
UniProt Protein Name	Glutamate receptor 1
UniProt Gene Name	Gria1
UniProt Synonym Gene Names	Glur1; GluR-1; GluA1
UniProt Entry Name	GRIA1_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/rat-elisa-kits/ampa-receptor-glutamate-receptor-1/249836>