

Datasheet: MCA6324

Description:	RABBIT ANTI GLUTAMATE RECEPTOR 1 (pSer845)
Specificity:	GLUTAMATE RECEPTOR 1 (pSer845)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RM296
Isotype:	IgG
Quantity:	0.1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Paraffin	▪			1/500 - 1/1000
Western Blotting	▪			1/1000 - 1/2000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Based on sequence similarity, is expected to react with: Mouse, Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography of Protein A from animal origin-free culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

50% Glycerol

Immunogen A phospho-peptide corresponding to Human glutamate receptor 1 (pSer845)

External Database Links

UniProt:

[P42261](#) [Related reagents](#)

Entrez Gene:

[2890](#) GRIA1 [Related reagents](#)

Synonyms GLUH1, GLUR1

Specificity **Rabbit anti Human glutamate receptor 1 (pSer845) antibody** recognizes glutamate receptor 1, also known as GRIA1, GLUA1, GLUR1, when phosphorylated at serine 845. Glutamate is the most abundant excitatory neurotransmitter in the vertebrate brain, and glutamate binding to glutamate receptors leads to activation of downstream neurons ([Zhu and Gouaux 2018](#)). The GRIA gene encodes a subunit of the ionotropic glutamate receptor (iGluRs), a ligand-gated ion channel which regulates neuronal excitability at the synaptic cleft (Yu and Lau 2017). Disrupted functions of glutamergic synapses are common in many cognitive and neuropsychiatric disorders, leading to imbalances between neuronal excitation and inhibition. Consistent with this, iGluRs have emerged as potential drug targets for schizophrenia, depression, and addiction ([Reiner and Levitz 2019](#)). Polymorphisms in GRIA1 appears to be a migraine-related gene ([Gao and Wang 2018](#)). Glutamate receptor 1 appears to play a role in mediating the growth and progression of triple-negative breast cancer, and also appears to play a role in melanoma ([Speyer et al. 2014](#)). Phosphorylation of glutamate receptor 1 at serine 845 is involved in AMPA receptor trafficking ([Lee et al. 2000](#)).

Storage Store at -20°C only.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10048 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA6324>
10048

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...)

[RPE](#)

Sheep Anti Rabbit IgG (STAR36...)

[DyLight®488](#), [DyLight®680](#), [DyLight®800](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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