



# GluR4/AMPA4

# **Data Sheet**

0.5% BSA

Catalog Number: GT41012 Host: Goat

Product Type: Affinity Purified Antibody Species Reactivity: Human, Mouse, Rat, Bovine

Immunogen Synthetic peptide: C- Format: Liquid 0.5 mg/ml.

Sequence: KKLDQREYPGSETP, from the Tris saline, 0.02% sodium azide, pH 7.3,

internal region of the protein sequence according to

NP\_000820.3; NP\_001070711.1; NP\_001070712.1.

Applications: Immunohistochemistry- 5-10µg/ml.

ions: Immunohistochemistry- 5-10μg/ml. Western Blot- 0.3-1μg/ml.

Peptide ELISA-1:128,000

Dilutions listed as a recommendation. Optimal dilution should be determined by investigator.

**Storage:** Aliquot and store at -20°C. Avoid repeated freeze-thaw cycles.

References: Earnshaw BA, Bressloff PC.Biophysical model of AMPA receptor trafficking and its regulation during

long-term potentiation/long-term depression. J Neurosci. 2006 Nov 22;26(47):12362-73.

### **Application Notes**

#### Specificity

This antibody is expected to recognize all reported isforms (NP\_000820.3; NP\_001070711.1; NP\_001070712.1). Reported variants NP\_001070712.1 and NP\_001106283.1 represent identical protein. IHC staining of paraffin embedded Human Cortex shows cytoplasm staining of neuronal cells.

#### Immunohistochemistry:

Tissue Preparation: Formalin fixation and embedding in paraffin wax.

Tissue Sectioning: Make 4-µm sections and place on pre-cleaned and charged microscope slides. Heat in a tissue-drying oven for 45 minutes at 60°C.

Deparaffinization: Wash dry slides in 3 changes of xylene - 5 minutes each at Room Temperature.

Rehydration: Wash slides in 3 changes of 100% alcohol – 3 minutes each at Room Temperature. Wash slides in 2 changes of 95% alcohol – 3 minutes each at Room Temperature Wash slides in 1 change of 80% alcohol – 3 minutes at Room Temperature. Rinse slides in gentle running distilled water – 5 minutes at Room Temperature.

Antigen retrieval: Steam slides in 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes. Remove from heat and let stand at room temperature in buffer - 20 minutes. Rinse in 1X TBS with Tween (TBST) – 1 minute at Room Temperature.

Immunostaining: (Do not allow tissues to dry at any time during the staining procedure). Apply a universal protein block – 20 minutes at Room Temperature. Drain protein block from slides, apply diluted primary antibody – 45 minutes at Room Temperature. Rinse slides in 1X TBST - 1 minute at Room Temperature. Apply a horse-anti-goat IgG, biotin secondary (HO30002)\*– 30 minutes at Room Temperature. Rinse slides in 1X TBST - 1 minute at Room Temperature. Apply alkaline phosphatase streptavidin – 30 minutes at Room Temperature. Rinse slides in 1X TBST - 1 minute at Room Temperature.

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Apply alkaline phosphatase chromogen substrate – 30 minutes at Room Temperature. Wash slides in distilled water – 1 minute at Room Temperature

Dehydrate: (This method should only be used if the chromogen substrate is alcohol insoluble (e.g. Vector Red, DAB). Wash slides in 2 changes of 80% alcohol – 1 minute each at Room Temperature. Wash slides in 2 changes of 95% alcohol – 1 minute each at Room Temperature. Wash slides in 3 changes of 100% alcohol – 1 minute each at Room Temperature. Wash slides in 3 changes of xylene – 1 minute each at Room Temperature. Apply coverslip

#### Western Blot:

Approx. 90 kDa band observed in Human Brain (Cerebellum) lysates (calculated MW of 99.2 kDa according to NP\_001070711.1). Recommended concentration: 0.3-1µg/ml.

\* Horse anti-goat IgG, Biotin (catalog# HO30002)

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