

## Product datasheet for **AP20233PU-N**

### GRIA4 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of GluR4 protein.
Formulation:	Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen; purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 100 kDa
Gene Name:	glutamate ionotropic receptor AMPA type subunit 4
Database Link:	<a href="#">Entrez Gene 2893 Human P48058</a>



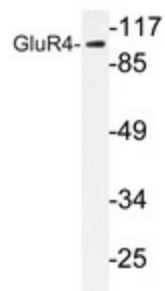
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**Background:**

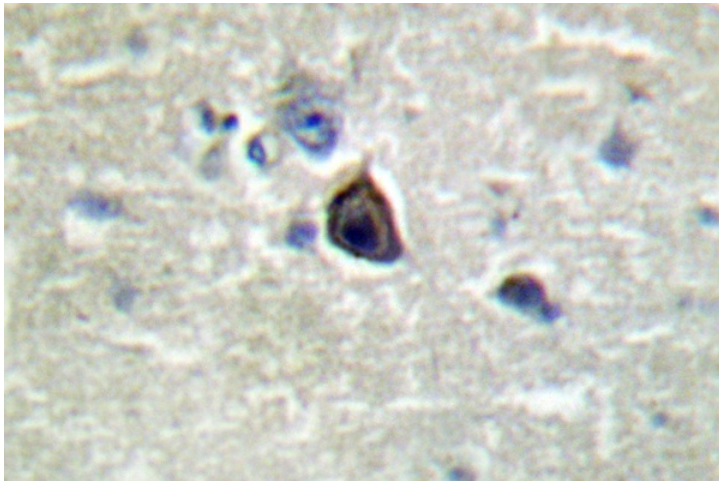
G protein-coupled inwardly rectifying potassium channels (KIR3.1 through KIR3.4) are coupled to numerous neurotransmitter receptors in the brain and are abundantly expressed in the olfactory bulb, hippocampus, neocortex, dentate gyrus, cerebellar cortex and thalamus regions of the brain. Also known as GIRK, KIR3 potassium channels localize to the soma and dendrites as well as axons of neurons. Liberated G $\beta\gamma$  subunits from G protein heterotrimers bind to and regulate KIR3 channel activity. G $\beta_3$ - and G $\beta_4$ -containing G $\beta\gamma$  dimers bind directly to cytoplasmic domains of KIR3 proteins and increase the K $^+$  current while G $\beta_5$ -containing G $\beta\gamma$  dimers inhibit KIR3 K $^+$  current. KIR3 activity is also inhibited by tyrosine phosphorylation. Brain-derived neurotrophic factor activates receptor tyrosine kinase B, which then phosphorylates KIR3 tyrosine residues, effectively inactivating the KIR3 channels.

**Synonyms:**

GluR-4, GRIA4, GluR-D, GluA4, Glutamate receptor ionotropic AMPA4

**Product images:**

Western blot analysis of GluR4 antibody (AP20233PU-N) in extracts from NIH/3T3 cells.



Immunohistochemistry (IHC) analyzes of GluR4 antibody (Cat.-No.: AP20233PU-N) in paraffin-embedded human brain tissue.