

## **GRID2IP Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54463

## **Product Information**

**Application** IHC-P, IHC-F, IF, ICC, E

Primary Accession A4D2P6

**Reactivity** Rat, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 132276
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human GRID2IP

Epitope Specificity 921-1020/1121

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Cell junction > synapse > postsynaptic cell membrane.

SIMILARITY Contains 1 FH2 (formin homology 2) domain. Contains 2 PDZ (DHR) domains. Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** Grid2ip is a postsynaptic scaffolding protein that contains one formin

homology 2 (FH2) domain and two PDZ (postsynaptic

density-95/discs-large/ZO-1) domains. Expressed in Purkinje cells of the cerebellum and localizing specifically to parallel fiber synapses, Grid2ip interacts with the C-terminus of GluR-Delta 2 and, via this interaction, links GluR-Delta 2 with various signaling molecules and the Actin cytoskeleton. GluR-Delta 2 is a glutamate receptor with an important role in motor learning, cerebellar wiring and synaptic plasticity. Due to alternative splicing events,

three Grid2ip isoforms exist, namely L-delphilin, S-delphilin (or delphilin-Alpha) and delphilin-Beta. Each isoform exhibits individual expression patterns and protein interactions. Isoform 2, delphilin-Alpha, is palmytoylated, a modification that is essential for the enhanced expression of GluR-Delta 2 on the cell surface. This modification of delphilin-Alpha also

mediates the accumulation of delphilin-Alpha in dendritic spines.

## **Additional Information**

**Gene ID** 392862

Other Names Delphilin, Glutamate receptor, ionotropic, delta 2-interacting protein 1,

**GRID2IP** 

**Dilution** IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-

10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

## **Protein Information**

Name GRID2IP

**Function** Postsynaptic scaffolding protein at the parallel fiber- Purkinje cell synapse,

where it may serve to link GRID2 with actin cytoskeleton and various signaling

molecules.

**Cellular Location** Postsynaptic cell membrane.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.