

**Goat Anti-PICK1 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1825a****Specification**

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**Goat Anti-PICK1 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">Q9NRD5</a>
Other Accession	<a href="#">NP_001034673</a> , <a href="#">9463</a> , <a href="#">18693 (mouse)</a> , <a href="#">84591 (rat)</a>
Reactivity	Mouse, Rat
Predicted	Human, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	46600

**Goat Anti-PICK1 Antibody - Additional Information****Gene ID** 9463**Other Names**

PRKCA-binding protein, Protein interacting with C kinase 1, Protein kinase C-alpha-binding protein, PICK1, PRKCABP

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-PICK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-PICK1 Antibody - Protein Information****Name** PICK1**Synonyms** PRKCABP

### Function

Probable adapter protein that bind to and organize the subcellular localization of a variety of membrane proteins containing some PDZ recognition sequence. Involved in the clustering of various receptors, possibly by acting at the receptor internalization level. Plays a role in synaptic plasticity by regulating the trafficking and internalization of AMPA receptors. May be regulated upon PRKCA activation. May regulate ASIC1/ASIC3 channel. Regulates actin polymerization by inhibiting the actin-nucleating activity of the Arp2/3 complex; the function is competitive with nucleation promoting factors and is linked to neuronal morphology regulation and AMPA receptor (AMPA) endocytosis. Via interaction with the Arp2/3 complex involved in regulation of synaptic plasticity of excitatory synapses and required for spine shrinkage during long-term depression (LTD). Involved in regulation of astrocyte morphology, antagonistic to Arp2/3 complex activator WASL/N-WASP function.

### Cellular Location

Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q9EP80}. Membrane {ECO:0000250|UniProtKB:Q9EP80}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9EP80}. Membrane {ECO:0000250|UniProtKB:Q62083}; Lipid-anchor {ECO:0000250|UniProtKB:Q62083}. Postsynaptic density {ECO:0000250|UniProtKB:Q9EP80}. Synapse, synaptosome {ECO:0000250|UniProtKB:Q9EP80}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9EP80}. Note=Also membrane-associated, present at excitatory synapses. {ECO:0000250|UniProtKB:Q9EP80}

### Tissue Location

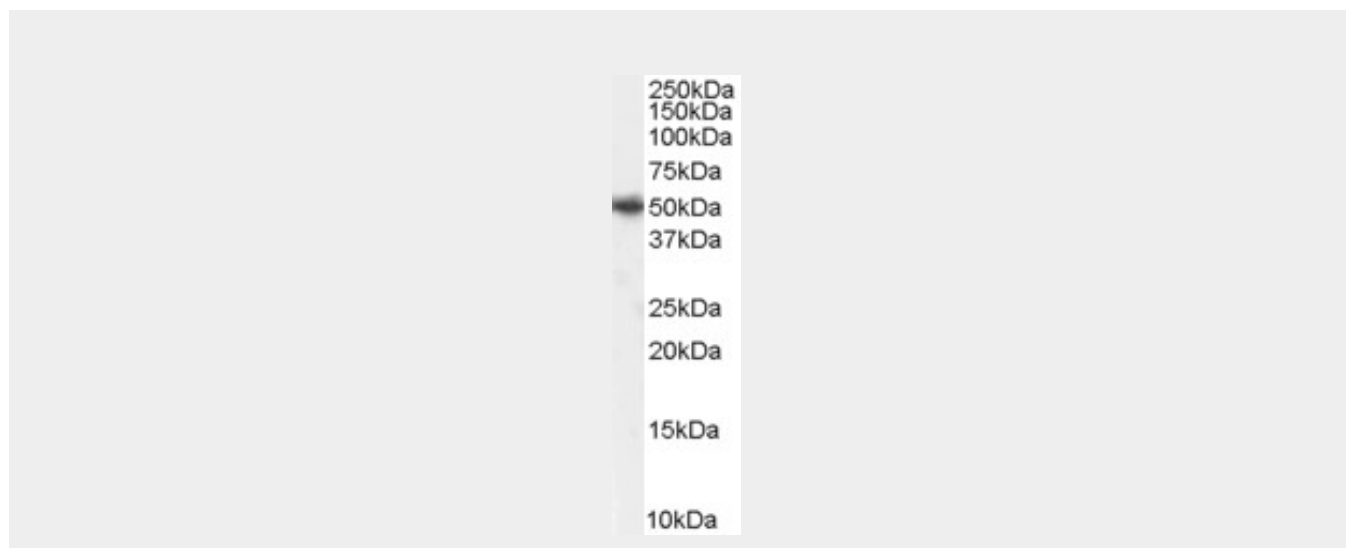
Ubiquitous.

### Goat Anti-PICK1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Goat Anti-PICK1 Antibody - Images



AF1825a (1 µg/ml) staining of mouse brain lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### **Goat Anti-PICK1 Antibody - Background**

The protein encoded by this gene contains a PDZ domain, through which it interacts with protein kinase C, alpha (PRKCA). This protein may function as an adaptor that binds to and organizes the subcellular localization of a variety of membrane proteins. It has been shown to interact with multiple glutamate receptor subtypes, monoamine plasma membrane transporters, as well as non-voltage gated sodium channels, and may target PRKCA to these membrane proteins and thus regulate their distribution and function. This protein has also been found to act as an anchoring protein that specifically targets PRKCA to mitochondria in a ligand-specific manner. Three transcript variants encoding the same protein have been found for this gene.

### **Goat Anti-PICK1 Antibody - References**

Protein interacting with C alpha kinase 1 (PICK1) is involved in promoting tumor growth and correlates with poor prognosis of human breast cancer. Zhang B, et al. Cancer Sci, 2010 Jun. PMID 20384629.

Identification of a small-molecule inhibitor of the PICK1 PDZ domain that inhibits hippocampal LTP and LTD. Thorsen TS, et al. Proc Natl Acad Sci U S A, 2010 Jan 5. PMID 20018661.

Genetic association studies of methamphetamine use disorders: A systematic review and synthesis. Bousman CA, et al. Am J Med Genet B Neuropsychiatr Genet, 2009 Dec 5. PMID 19219857.

Identification of new putative susceptibility genes for several psychiatric disorders by association analysis of regulatory and non-synonymous SNPs of 306 genes involved in neurotransmission and neurodevelopment. Gratac[il]s M, et al. Am J Med Genet B Neuropsychiatr Genet, 2009 Sep 5. PMID 19086053.

The BTB/kelch protein, KRIP6, modulates the interaction of PICK1 with GluR6 kainate receptors. Laezza F, et al. Neuropharmacology, 2008 Dec. PMID 18692513.