

Goat Anti-Kalirin (isoform 2) Antibody Peptide-affinity purified goat antibody Catalog # AF1579a

## **Specification**

# Goat Anti-Kalirin (isoform 2) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Concentration Isotype Calculated MW WB, IHC, E <u>O60229</u> <u>NP\_003938</u>, <u>8997</u>, <u>545156 (mouse)</u>, <u>84009 (rat)</u> Human, Mouse, Rat Goat Polyclonal 100ug/200ul IgG 340261

## Goat Anti-Kalirin (isoform 2) Antibody - Additional Information

Gene ID 8997

**Other Names** Kalirin, 2.7.11.1, Huntingtin-associated protein-interacting protein, Protein Duo, Serine/threonine-protein kinase with Dbl- and pleckstrin homology domain, KALRN, DUET, DUO, HAPIP, TRAD

**Dilution** WB~~1:1000 IHC~~1:100~500 E~~N/A

**Format** 0.5 mg lgG/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-Kalirin (isoform 2) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Goat Anti-Kalirin (isoform 2) Antibody - Protein Information

Name KALRN (<u>HGNC:4814</u>)

Synonyms DUET, DUO, HAPIP, TRAD



#### **Function**

Promotes the exchange of GDP by GTP. Activates specific Rho GTPase family members, thereby inducing various signaling mechanisms that regulate neuronal shape, growth, and plasticity, through their effects on the actin cytoskeleton. Induces lamellipodia independent of its GEF activity.

### **Cellular Location**

Cytoplasm. Cytoplasm, cytoskeleton. Note=Associated with the cytoskeleton

#### Tissue Location

Isoform 2 is brain specific. Highly expressed in cerebral cortex, putamen, amygdala, hippocampus and caudate nucleus Weakly expressed in brain stem and cerebellum. Isoform 4 is expressed in skeletal muscle.

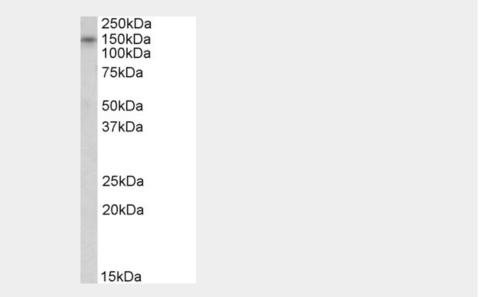
# Goat Anti-Kalirin (isoform 2) Antibody - Protocols

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

#### <u>Western Blot</u>

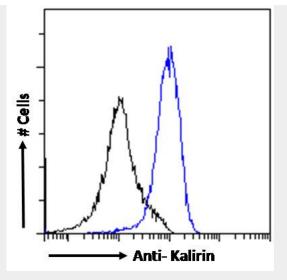
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-Kalirin (isoform 2) Antibody - Images



Antibody (1.0µg/ml) staining of Mouse Brain lysate (35µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

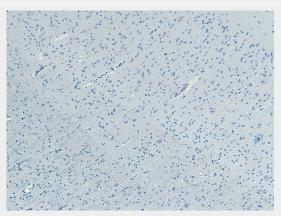




EB06143 Flow cytometric analysis of paraformaldehyde fixed A431 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.



EB06143 (5 $\mu$ g/ml) staining of paraffin embedded Human Cortex. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



EB06143 Negative Control showing staining of paraffin embedded Human Cortex, with no primary antibody.

# Goat Anti-Kalirin (isoform 2) Antibody - Background

Huntington's disease (HD), a neurodegenerative disorder characterized by loss of striatal neurons,



is caused by an expansion of a polyglutamine tract in the HD protein huntingtin. This gene encodes a protein that interacts with the huntingtin-associated protein 1, which is a huntingtin binding protein that may function in vesicle trafficking. Alternatively spliced transcript variants encoding different isoforms have been described.

# Goat Anti-Kalirin (isoform 2) Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Kalirin: a novel genetic risk factor for ischemic stroke. Krug T, et al. Hum Genet, 2010 Mar. PMID 20107840.

Inherited genetic variant predisposes to aggressive but not indolent prostate cancer. Xu J, et al. Proc Natl Acad Sci U S A, 2010 Feb 2. PMID 20080650.

Identification of SH3 domain interaction partners of human FasL (CD178) by phage display screening. Voss M, et al. BMC Immunol, 2009 Oct 6. PMID 19807924.

Validation study of genetic associations with coronary artery disease on chromosome 3q13-21 and potential effect modification by smoking. Horne BD, et al. Ann Hum Genet, 2009 Nov. PMID 19706030.