10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KALRN Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54650

Specification

KALRN Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	O60229
Reactivity	**Rat, Pig, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**340 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human KALRN/Duo**
Epitope Specificity	**1401-1500/2985**
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	**Cytoplasm. Cytoplasm, cytoskeleton. Note=Associated with the cytoskeleton.**
SIMILARITY	**Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. Contains 1 CRAL-TRIO domain. Contains 2 DH (DBL-homology) domains. Contains 1 fibronectin type-III domain. Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 2 PH domains. Contains 1 protein kinase domain. Contains 2 SH3 domains. Contains 5 spectrin repeats.**
SUBUNIT	**Interacts with the C-terminal of peptidylglycine alpha-amidating monooxygenase (PAM) and with the huntingtin-associated protein 1 (HAP1) (By similarity). Interacts with FASLG.**
Post-translational modifications	**Autophosphorylated.**
DISEASE	**Genetic variation in KALRN is associated with susceptibility to coronary heart disease type 5 (CHDS5) [MIM:608901]. CHD is the leading cause of death and disability worldwide. CHD is multifactorial disease with a strong genetic component. Classic epidemiologic studies have revealed many risk factors for CHD, including age, sex, hypertension, dyslipidemia, diabetes mellitus, smoking, and physical inactivity.**
Important Note	**This product as supplied is intended for research use only, not for use in human,**

therapeutic or diagnostic applications.

Background Descriptions
HAP1 (huntingtin-associated protein 1) binds to huntingtin. Huntingtin is a protein that contains a polyglutamine region and when the number of glutamine repeats exceeds 35, the gene encodes a version of huntingtin that leads to Huntington's disease (HD). The ability of HAP1 to bind to huntingtin is enhanced by an expanded polyglutamine repeat region. HAP1 shows neuronal localization and moves with huntingtin in nerve fibers. HAP1 is primarily expressed in brain tissue, with greater expression in the olfactory bulb and brain stem. Mouse HAP1 is localized to membrane-bound organelles including large endosomes, tubulovesicular structures and budding vesicles in neurons. Duo, also designated huntingtin-associated protein interacting protein or HAPIP, binds Huntingtin-associated protein 1 (HAP1) and may have a role in vesicle trafficking and cytoskeletal function.

KALRN Polyclonal 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 (HGNC:4814), DUET, DUO, HAPIP, TRAD

Target/Specificity
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.

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

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

Storage
Store at -20 ℃ 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 ℃.

KALRN Polyclonal Antibody - Protein Information

Name KALRN (HGNC:4814)

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.

KALRN Polyclonal 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 Cytomety
- Cell Culture

KALRN Polyclonal Antibody - Images