

Rabbit Anti-KALRN antibody

SL11861R

| Product Name: | KALRN |
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| Chinese Name: | 舞蹈症相关蛋白KALRN抗体 |
| Alias: | Duo; FLJ16443; HAPIP; Huntingtin associated protein interacting protein (duo); Huntingtin-associated protein-interacting protein; Kalirin (isoform 2); Kalirin; KALRN ; KALRN_HUMAN ; Protein Duo; RhoGEF kinase; Serine/threonine kinase with Dbl and pleckstrin homology domains ; Serine/threonine-protein kinase with Dbl- and pleckstrin homology domain; TRAD. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Mouse,Rat,Chicken,Dog,Pig,Horse, |
| Applications: | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 340kDa |
| Cellular localization: | cytoplasmic |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human KALRN/Duo:1401-1500/2985 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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. |
| PubMed: | PubMed |
| Product Detail: | 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.

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.

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.

Subcellular Location:

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

Tissue 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.

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.

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. |
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| | SWISS: O60229 |
| | Gene ID: 8997 |
| | Database links: |
| | Entrez Gene: 8997 Human |
| | Entrez Gene: 545156 Mouse |
| | Entrez Gene: 84009 Rat |
| | <u>Omim: 604605</u> Human |
| | Entrez Gene: 84009 Rat Omim: 604605 Human SwissProt: O60229 Human SwissProt: A2CG49 Mouse |
| | SwissProt: A2CG49 Mouse |
| | SwissProt: P97924 Rat |
| | Unigene: 8004 Human |
| | Unigene: 353103 Mouse |
| | Unigene: 450612 Mouse |
| | Unigene: 82274 Mouse |
| | Unigene: 87882 Rat |
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| | Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |