

Rabbit Anti-KIRREL3 antibody

SL11864R

| Product Name: | KIRREL3 |
|------------------------|--|
| Chinese Name: | 肾病样蛋白3抗体 |
| Alias: | Kin of IRRE like 3 (Drosophila); Kin of IRRE like 3; Kin of irregular chiasm like protein 3; KIRRE; KIRREL 3; KIRREL-3; MRD4; NEPH2; Nephrin like 2; PRO19814; PRO4502; yUNQ5923; KIRR3 HUMAN. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human, Mouse, Rat, Chicken, |
| Applications: | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestICC=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: | 83kDa |
| Cellular localization: | The cell membrane |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human KIRREL3:561-450/778 <extracellular></extracellular> |
| 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: | <u>PubMed</u> |
| Product Detail: | NEPH2 is a 778 amino acid single-pass type I membrane protein that belongs to the nephrin-like protein family and immunoglobulin superfamily. Expressed in both fetal and adult brain, as well as podocytes of kidney glomeruli, NEPH2 contains five Ig-like C2-type (immunoglobulin-like) domains and is thought to plaly a role in the |

hematopoetic supportive capacity of stroma cells. NEPH2 undergoes alternative splicing to produce two isoforms and contains a C-terminal cytoplasmic domain which it uses to interact with Podocin, a podocyte protein involved in ultrafiltration. Defects in the gene encoding NEPH2 are associated with mental retardation autosomal dominant type 4 (MRD4).

Function:

NEPH2 is a member of the nephrin like protein family, which includes NEPH1 (KIRREL; MIM 607428) and NEPH3 (KIRREL2; MIM 607762). The cytoplasmic domains of these proteins interact with the C terminus of podocin (NPHS2; MIM 604766), and the genes are expressed in kidney podocytes, cells involved in ensuring size and charge selective ultrafiltration (Sellin et al., 2003 [PubMed 12424224]).

Subunit:

Interacts with the C-terminus of NPHS2/podocin. Interacts with CASK.

Subcellular Location:

Cell membrane; Single-pass type I membrane protein

Tissue Specificity:

Expressed in fetal and adult brain. Also expressed in kidney, specifically in podocytes of kidney glomeruli.

DISEASE:

Note=A chromosomal aberration involving KIRREL3 and CDH15 is found in a patient with severe mental retardation and dysmorphic facial features. Translocation t(11;16)(q24.2;q24).

Defects in KIRREL3 are the cause of mental retardation autosomal dominant type 4 (MRD4) [MIM:612581]. Mental retardation is characterized by significantly subaverage general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period.

Similarity:

Belongs to the immunoglobulin superfamily.

Contains 5 Ig-like C2-type (immunoglobulin-like) domains.

SWISS:

Q8IZU9

Gene ID:

84623

Database links:

Entrez Gene: 84623Human

Entrez Gene: 67703Mouse

Entrez Gene: 315546Rat

Omim: 607761 Human

SwissProt: Q8IZU9Human

SwissProt: Q8BR86Mouse

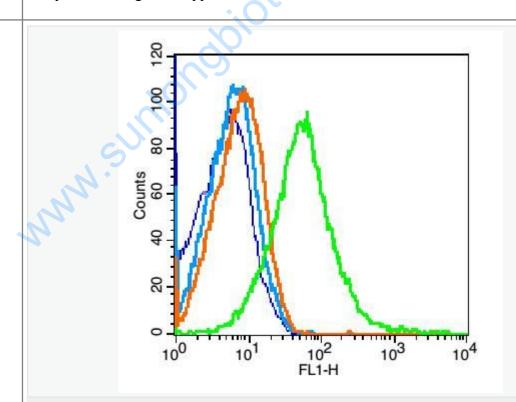
Unigene: 376015Human

Unigene: 220710 Mouse

Unigene: 7602Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Blank control(blue): Mouse nephrocytes (fixed with 2% paraformaldehyde (10 min)).

Primary Antibody:Rabbit Anti- KIRREL3 antibody(SL11864R), Dilution: 1µg in

100 μL 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

