



Rabbit Anti-KIRREL1 antibody

SL6435R

Product Name:	KIRREL1
Chinese Name:	肾病样蛋白1抗体
Alias:	Kin of IRRE like (Drosophila); Kin of IRRE like; Kin of IRRE like protein 1; Kin of IRRE-like protein 1; Kin of irregular chiasm like protein 1; Kin of irregular chiasm-like protein 1; KIRR1_HUMAN; Kirrel; MGC129542; MGC129543; NEPH 1; NEPH1; Nephtrin like protein 1; Nephtrin related; Nephtrin-like protein 1; KIRR1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	82kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human KIRREL1/NEPH1:301-400/757<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:	PubMed
Product Detail:	Neph1(Kirrel) belongs to a family of three closely related transmembrane proteins of the Ig superfamily with a structure similar to that of nephrin. Neph1 consists of a signal peptide, five Ig-like C2-type domains with the middle domain overlapping with a PKD-

like domain, an RGD sequence, a transmembrane domain and a cytoplasmic tail. Neph1 is abundantly expressed in the kidney, specifically expressed in podocytes of kidney glomeruli, and plays a significant role in the normal development and function of the glomerular permeability. Neph1 interacts with nephrin in vitro and in vivo, and able to stimulate transcriptional activation in a model system, such as the activation the transcription factor AP-1 via the stimulation of a MAPK module. Neph1 is crucial for the integrity of the slit diaphragm, as Neph1 gene knockout mice results in effacement of glomerular podocytes, heavy proteinuria, and early postnatal death. .

Tissue specificity:

Abundantly expressed in kidney. Specifically expressed in podocytes of kidney glomeruli.

Function:

Plays a significant role in the normal development and function of the glomerular permeability. Signaling protein that needs the presence of TEC kinases to fully trans-activate the transcription factor AP-1 (By similarity).

Subunit:

Interacts with TJP1/ZO-1 and with NPHS2/podocin (via the C-terminus). Interacts with NPHS1/nephrin (via the Ig-like domains); this interaction is dependent on KIRREL glycosylation. Homodimer (via the Ig-like domains). Interacts when tyrosine-phosphorylated with GRB2 (By similarity).

Subcellular Location:

Cell membrane; Single-pass type I membrane protein.

Tissue Specificity:

Abundantly expressed in kidney. Specifically expressed in podocytes of kidney glomeruli.

Post-translational modifications:

Phosphorylation probably regulates the interaction with NSH2. Phosphorylated at Tyr-605 and Tyr-606 by FYN, leading to GRB2 binding (By similarity).

N-glycosylated (By similarity).

Similarity:

Belongs to the immunoglobulin superfamily.

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

SWISS:

Q96J84

Gene ID:

84623

Database links:

[Entrez Gene: 84623](#)Human

[Entrez Gene: 67703](#)Mouse

[Entrez Gene: 315546](#)Rat

[Oimim: 607761](#)Human

[SwissProt: Q8IZU9](#)Human

[SwissProt: Q8BR86](#)Mouse

[Unigene: 376015](#)Human

[Unigene: 220710](#)Mouse

[Unigene: 7602](#)Rat

Important Note:

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