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KIRREL Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19861b

Product Information

Application	WB, E
Primary Accession	Q96J84
Other Accession	Q6X936, Q80W68, NP_060710.3
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41570
Calculated MW	83536
Antigen Region	505-534

Additional Information

Gene ID	55243
Other Names	Kin of IRRE-like protein 1, Kin of irregular chiasm-like protein 1, Nephrin-like protein 1, KIRREL, KIRREL1, NEPH1
Target/Specificity	This KIRREL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 505-534 amino acids from the C-terminal region of human KIRREL.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KIRREL Antibody(C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KIRREL1 (HGNC:15734)
Synonyms	KIRREL, NEPH1

Function	Required for proper function of the glomerular filtration barrier. It is involved in the maintenance of a stable podocyte architecture with interdigitating foot processes connected by specialized cell-cell junctions, known as the slit diaphragm (PubMed:31472902). It is a signaling protein that needs the presence of TEC kinases to fully trans-activate the transcription factor AP-1 (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Note=Predominantly located at podocyte slit diaphragm
Tissue Location	Abundantly expressed in kidney. Specifically expressed in podocytes of kidney glomeruli

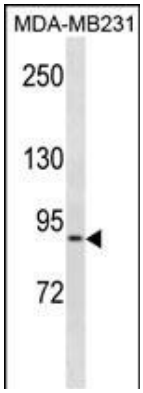
Background

NEPH1 is a member of the nephrin-like protein family, which includes NEPH2 (MIM 607761) and NEPH3 (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]).

References

Machuca, E., et al. J. Am. Soc. Nephrol. 21(7):1209-1217(2010)
Wagner, M.C., et al. J. Biol. Chem. 283(51):35579-35589(2008)
Hartleben, B., et al. J. Biol. Chem. 283(34):23033-23038(2008)
Harita, Y., et al. J. Biol. Chem. 283(14):9177-9186(2008)
Ihalmo, P., et al. Diabetologia 51(1):86-90(2008)

Images



KIRREL Antibody (C-term) (Cat. #AP19861b) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the KIRREL antibody detected the KIRREL protein (arrow).