

KIRREL Blocking Peptide(C-term)

Synthetic peptide Catalog # BP19861b

Specification

KIRREL Blocking Peptide(C-term) - Product Information

Primary Accession <u>Q96J84</u>

Other Accession <u>Q6X936</u>, <u>Q80W68</u>, <u>NP 060710.3</u>

KIRREL Blocking Peptide(C-term) - 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

The synthetic peptide sequence is selected from aa 520-534 of HUMAN KIRREL

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KIRREL Blocking Peptide(C-term) - 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

KIRREL Blocking Peptide(C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

KIRREL Blocking Peptide(C-term) - Images

KIRREL Blocking Peptide(C-term) - 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]).

KIRREL Blocking Peptide(C-term) - 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)