

**KIRREL Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP5761c****Specification**

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**KIRREL Antibody (Center) Blocking peptide - Product Information**

Primary Accession [O96J84](#)  
Other Accession [NP\\_060710.3](#)

**KIRREL Antibody (Center) Blocking peptide - 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

**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 Antibody (Center) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/31472902" target="\_blank">31472902</a>). 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 Antibody (Center) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

## **KIRREL Antibody (Center) Blocking peptide - Images**

## **KIRREL Antibody (Center) Blocking peptide - 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 Antibody (Center) Blocking peptide - References**

Huber, T.B., et al. J. Biol. Chem. 278(15):13417-13421(2003) Gerke, P., et al. J. Am. Soc. Nephrol. 14(4):918-926(2003) Sellin, L., et al. FASEB J. 17(1):115-117(2003) Donoviel, D.B., et al. Mol. Cell. Biol. 21(14):4829-4836(2001)