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NCKPL Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP18156c

Specification

NCKPL Antibody (Center) Blocking Peptide - Product Information

Primary Accession P55160

NCKPL Antibody (Center) Blocking Peptide - Additional Information

Gene ID 3071

Other Names
Nck-associated protein 1-like, Hematopoietic protein 1, Membrane-associated protein HEM-1, NCKAP1L, HEM1

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.

NCKPL Antibody (Center) Blocking Peptide - Protein Information

Name NCKAP1L (HGNC:4862)

Function
Essential hematopoietic-specific regulator of the actin cytoskeleton (Probable). Controls lymphocyte development, activation, proliferation and homeostasis, erythrocyte membrane stability, as well as phagocytosis and migration by neutrophils and macrophages (PubMed:16417406, PubMed:17696648). Component of the WAVE2 complex which signals downstream of RAC to stimulate F-actin polymerization. Required for stabilization and/or translation of the WAVE2 complex proteins in hematopoietic cells (By similarity). Within the WAVE2 complex, enables the cortical actin network to restrain excessive degranulation and granule release by T-cells (PubMed:32647003). Required for efficient T-lymphocyte and neutrophil migration (PubMed:32647003). Exhibits complex cycles of activation and inhibition to generate waves of propagating the assembly with actin (PubMed:16417406). Also involved in mechanisms WAVE-independent to regulate myosin and actin polymerization during neutrophil chemotaxis (PubMed:17696648). In T-cells,

required for proper mechanistic target of rapamycin complex 2 (mTORC2)-dependent AKT phosphorylation, cell proliferation and cytokine secretion, including that of IL2 and TNF (PubMed:32647003).

Cellular Location
Cell membrane; Single-pass membrane protein; Cytoplasmic side. Cytoplasm. Note=Localizes to the leading edge of polarized neutrophils

Tissue Location
Expressed only in cells of hematopoietic origin (PubMed:7643388, PubMed:1932118). Expressed in neutrophils (at protein level) (PubMed:16417406). Expressed in T-cells (at protein level) (PubMed:32647003).

NCKPL Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

NCKPL Antibody (Center) Blocking Peptide - Images

NCKPL Antibody (Center) Blocking Peptide - Background

This gene encodes a member of the HEM family oftissue-specific transmembrane proteins which are highly conservedfrom invertebrates through mammals. This gene is only expressed inhematopoietic cells. The encoded protein is a part of the Scar/WAVEcomplex which plays an important role in regulating cell shape inboth metazoans and plants. Alternatively spliced transcriptvariants encoding different isoforms have been found.

NCKPL Antibody (Center) Blocking Peptide - References

Joshi, A.D., et al. Clin. Cancer Res. 13 (18 PT 1), 5295-5304 (2007) :Weiner, O.D., et al. PLoS Biol. 5 (9), E221 (2007) :Weiner, O.D., et al. PLoS Biol. 4 (2), E38 (2006) :Baumgartner, S., et al. J. Mol. Biol. 251(1):41-49(1995)Hromas, R., et al. Biochim. Biophys. Acta 1090(2):241-244(1991)