

NCKPL Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18156c

Specification

NCKPL Antibody (Center) - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Calculated MW
Antigen Region

WB,E <u>P55160</u> <u>NP_005328.2</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 128153 641-669

NCKPL Antibody (Center) - Additional Information

Gene ID 3071

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

Target/Specificity

This NCKPL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 641-669 amino acids from the Central region of human NCKPL.

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

NCKPL Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

NCKPL Antibody (Center) - Protein Information

Name NCKAP1L (<u>HGNC:4862</u>)



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:<u>16417406</u>, PubMed:<u>17696648</u>). 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:<u>32647003</u>). Required for efficient T-lymphocyte and neutrophil migration (PubMed:<u>32647003</u>). Exhibits complex cycles of activation and inhibition to generate waves of propagating the assembly with actin (PubMed:<u>16417406</u>). Also involved in mechanisms WAVE-independent to regulate myosin and actin polymerization during neutrophil chemotaxis (PubMed:<u>17696648</u>). 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:<u>32647003</u>).

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:1932118, PubMed:7643388). Expressed in neutrophils (at protein level) (PubMed:16417406). Expressed in T-cells (at protein level) (PubMed:32647003).

NCKPL Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

NCKPL Antibody (Center) - Images





NCKPL Antibody (Center) (Cat. #AP18156c) western blot analysis in mouse stomach tissue lysates (35ug/lane). This demonstrates the NCKPL antibody detected the NCKPL protein (arrow).

NCKPL Antibody (Center) - Background

This gene encodes a member of the HEM family of tissue-specific transmembrane proteins which are highly conserved from invertebrates through mammals. This gene is only expressed in hematopoietic cells. The encoded protein is a part of the Scar/WAVE complex which plays an important role in regulating cell shape in both metazoans and plants. Alternatively spliced transcript variants encoding different isoforms have been found.

NCKPL Antibody (Center) - 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)