

ICK Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP7541b**Specification**

ICK Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession
Other Accession[O9UPZ9](#)
[NP_057597](#)**ICK Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 22858**Other Names**

Serine/threonine-protein kinase ICK, Intestinal cell kinase, hICK, Laryngeal cancer kinase 2, LCK2, MAK-related kinase, MRK, ICK, KIAA0936

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7541b](/product/products/AP7541b) was selected from the C-term region of human ICK. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

ICK Antibody (C-term) Blocking Peptide - Protein Information**Name** CILK1**Synonyms** ICK, KIAA0936**Function**

Required for ciliogenesis (PubMed: [24797473](http://www.uniprot.org/citations/24797473)). Phosphorylates KIF3A (By similarity). Involved in the control of ciliary length (PubMed: [24853502](http://www.uniprot.org/citations/24853502)). Regulates the ciliary localization of SHH pathway components as well as the localization of IFT components at ciliary tips (By similarity). May play a key role in the development of multiple organ systems and particularly in cardiac development (By similarity). Regulates intraflagellar transport (IFT) speed and negatively regulates cilium length in a cAMP and mTORC1 signaling- dependent manner and this regulation requires its kinase activity (By

similarity).

Cellular Location

Nucleus. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q62726}. Cell projection, cilium. Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250|UniProtKB:Q9JKV2}. Note=Also found at the ciliary tip (PubMed:24797473). Nuclear localization has been observed with a GFP- tagged construct in transfected HeLa cells (PubMed:12103360, PubMed:19185282).

Tissue Location

Expressed in heart, brain, placenta, pancreas, thymus, prostate, testis, ovary, small intestine and colon, with highest levels in placenta and testis. Not detected in spleen. Also expressed in many cancer cell lines.

ICK Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ICK Antibody (C-term) Blocking Peptide - Images

ICK Antibody (C-term) Blocking Peptide - Background

Eukaryotic protein kinases are enzymes that belong to a very extensive family of proteins which share a conserved catalytic core common with both serine/threonine and tyrosine protein kinases. ICK is an intestinal serine/threonine kinase harboring a dual phosphorylation site found in mitogen-activating protein (MAP) kinases. The protein localizes to the intestinal crypt region and is thought to be important in intestinal epithelial cell proliferation and differentiation.

ICK Antibody (C-term) Blocking Peptide - References

Yang, T., et al., Biomol. Eng. 19(1):1-4 (2002).Togawa, K., et al., J. Cell. Physiol. 183(1):129-139 (2000).