

## KIAA0174 Antibody (N-term) Blocking Peptide Synthetic peptide Catalog # BP9721a

Specification

## KIAA0174 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>P53990</u>

## KIAA0174 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 9798

**Other Names** IST1 homolog, hIST1, Putative MAPK-activating protein PM28, IST1, KIAA0174

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.

# KIAA0174 Antibody (N-term) Blocking Peptide - Protein Information

Name IST1

## Synonyms KIAA0174

## Function

ESCRT-III-like protein involved in cytokinesis, nuclear envelope reassembly and endosomal tubulation (PubMed: <a href="http://www.uniprot.org/citations/19129479" target=" blank">19129479</a>, PubMed:<a href="http://www.uniprot.org/citations/26040712" target=" blank">26040712</a>, PubMed:<a href="http://www.uniprot.org/citations/28242692" target=" blank">28242692</a>). Is required for efficient abscission during cytokinesis (PubMed:<a href="http://www.uniprot.org/citations/19129479" target=" blank">19129479</a>). Involved in recruiting VPS4A and/or VPS4B to the midbody of dividing cells (PubMed:<a href="http://www.uniprot.org/citations/19129479" target=" blank">19129479</a>, PubMed:<a href="http://www.uniprot.org/citations/19129480" target=" blank">19129480</a>). During late anaphase, involved in nuclear envelope reassembly and mitotic spindle disassembly together with the ESCRT-III complex: IST1 acts by mediating the recruitment of SPAST to the nuclear membrane, leading to microtubule severing (PubMed:<a href="http://www.uniprot.org/citations/26040712" target=" blank">26040712</a>). Recruited to the reforming nuclear envelope (NE) during anaphase by LEMD2 (PubMed:<a href="http://www.uniprot.org/citations/28242692" target=" blank">28242692</a>). Regulates early endosomal tubulation together with the ESCRT-III complex by mediating the recruitment of SPAST (PubMed:<a



href="http://www.uniprot.org/citations/23897888" target="\_blank">23897888</a>).

#### **Cellular Location**

Cytoplasmic vesicle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Midbody. Nucleus envelope Note=Localizes to centrosome and midbody of dividing cells (PubMed:19129479, PubMed:19129480, PubMed:20719964). Colocalized with SPART to the ends of Flemming bodies during cytokinesis (PubMed:20719964). Localizes to the reforming nuclear envelope on chromatin disks during late anaphase.

## KIAA0174 Antibody (N-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

## KIAA0174 Antibody (N-term) Blocking Peptide - Images

#### KIAA0174 Antibody (N-term) Blocking Peptide - Background

KIAA0174 is proposed to be involved in specific functions of the ESCRT machinery. It is required for efficient abscission during cytokinesis, but not for HIV-1 budding. The involvment in the MVB pathway is not established. Involved in recruiting VPS4A and/or VPS4B to the midbody of dividing cells.

# KIAA0174 Antibody (N-term) Blocking Peptide - References

Bajorek, M., et al. Nat. Struct. Mol. Biol. 16(7):754-762(2009)Agromayor, M., et al. Mol. Biol. Cell 20(5):1374-1387(2009)ajorek, M., et al. Mol. Biol. Cell 20(5):1360-1373(2009)