

## **IST1** Antibody

Rabbit Polyclonal Antibody Catalog # ALS15595

## **Specification**

### **IST1 Antibody - Product Information**

Application IHC
Primary Accession P53990
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 40kDa KDa

## **IST1** Antibody - Additional Information

**Gene ID 9798** 

#### **Other Names**

IST1 homolog, hIST1, Putative MAPK-activating protein PM28, IST1, KIAA0174

# Target/Specificity

Human IST1

#### **Reconstitution & Storage**

Aliquot and freeze at -20° C. Avoid freeze-thaw cycles.

#### **Precautions**

IST1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **IST1 Antibody - 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/19129480" target="\_blank">19129480</a>, PubMed:<a href="http://www.uniprot.org/citations/19129479" target="\_blank">19129479</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**

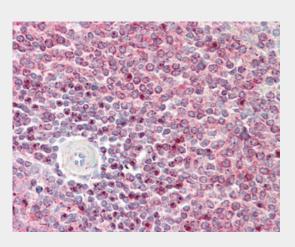
Cytoplasmic vesicle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Midbody. Nucleus envelope Note=Localizes to centrosome and midbody of dividing cells (PubMed:19129480, PubMed:19129479, PubMed:20719964). Colocalized with SPART to the ends of Flemming bodies during cytokinesis (PubMed:20719964).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

## **IST1** Antibody - Protocols

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

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

## IST1 Antibody - Images



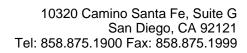
Anti-IST1 antibody IHC staining of human spleen.

# IST1 Antibody - Background

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

# **IST1** Antibody - References

Nagase T., et al. DNA Res. 3:17-24(1996). Matsuda A., et al. Oncogene 22:3307-3318(2003). Ota T., et al. Nat. Genet. 36:40-45(2004).





Martin J., et al. Nature 432:988-994(2004). Rush J., et al. Nat. Biotechnol. 23:94-101(2005).