

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: [19129479](http://www.uniprot.org/citations/19129479)), PubMed: [26040712](http://www.uniprot.org/citations/26040712), PubMed: [28242692](http://www.uniprot.org/citations/28242692)). Is required for efficient abscission during cytokinesis (PubMed: [19129479](http://www.uniprot.org/citations/19129479)). Involved in recruiting VPS4A and/or VPS4B to the midbody of dividing cells (PubMed: [19129480](http://www.uniprot.org/citations/19129480), PubMed: [19129479](http://www.uniprot.org/citations/19129479)). 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: [26040712](http://www.uniprot.org/citations/26040712))

target="_blank">26040712). Recruited to the reforming nuclear envelope (NE) during anaphase by LEMD2 (PubMed:28242692). Regulates early endosomal tubulation together with the ESCRT-III complex by mediating the recruitment of SPAST (PubMed:23897888).

Cellular Location

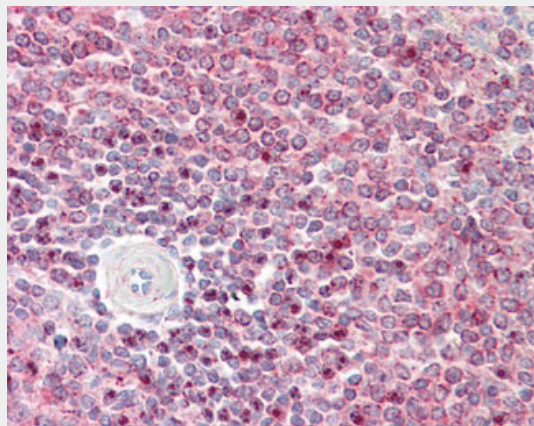
Cytoplasmic vesicle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Midbody. Nucleus envelope Note=Localizes to centrosome and midbody of dividing cells (PubMed:19129480, PubMed:19129479, PubMed:20719964). Colocalized with SPART to the ends of Flemming bodies during cytokinesis (PubMed:20719964). 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](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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).