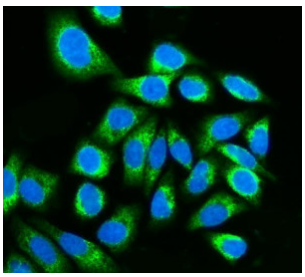
Kinectin 1 Antibody / KTN1 Polyclonal Antibody (FY13686)

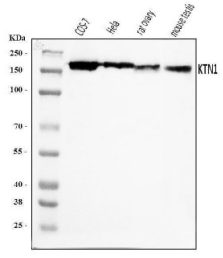
Catalog No.	Formulation	Size
FY13686	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

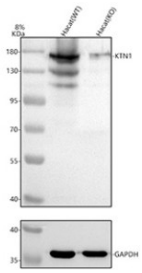
Species Reactivity	Human, Mouse, Rat, Monkey
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q86UP2
Applications	Western blot: 1-2ug/ml Flow cytometry: 1-3ug/million cells Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This Kinectin 1 Antibody / KTN1 Polyclonal Antibody is available for research use only.



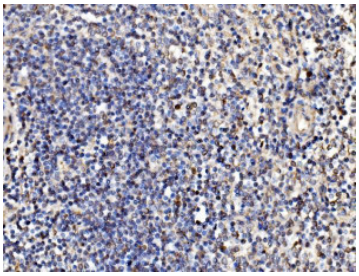
Kinectin 1 Antibody IF Staining of Human Hep3B Cells. Immunofluorescence analysis of human Hep3B cells using KTN1 Polyclonal Antibody. Green fluorescence indicates KTN1 immunoreactivity distributed throughout the cytoplasm, with prominent perinuclear and peripheral cellular staining. DAPI counterstaining identifies nuclei in blue. The cytoplasmic distribution is compatible with the established association of kinectin 1 with endoplasmic reticulum membranes.



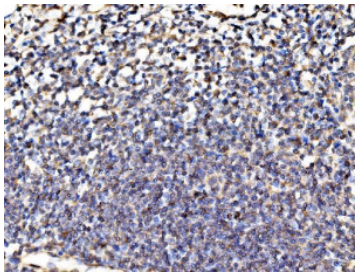
Kinectin 1 Antibody Western Blot Analysis of COS-7, HeLa, Rat Ovary and Mouse Testis Lysates. Western blot analysis using KTN1 Polyclonal Antibody. Lane 1: monkey COS-7 cells; lane 2: human HeLa cells; lane 3: rat ovary; lane 4: mouse testis. Immunoreactive bands are detected near 160 kDa across all four samples, consistent with the observed molecular weight of kinectin 1 and its calculated molecular weight of approximately 156.3 kDa.



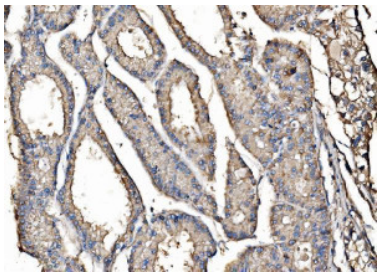
Kinectin 1 Antibody Western Blot Validation in HaCaT Wild-Type and KTN1 Knockout Cells. Western blot analysis of human HaCaT wild-type (WT) and KTN1 knockout (KO) whole-cell lysates using KTN1 Polyclonal Antibody. A prominent immunoreactive band near 160 kDa is detected in the WT lysate and is substantially reduced in the KO sample, supporting target specificity for kinectin 1. Additional lower-molecular-weight bands are visible in the WT sample. GAPDH serves as the loading control.



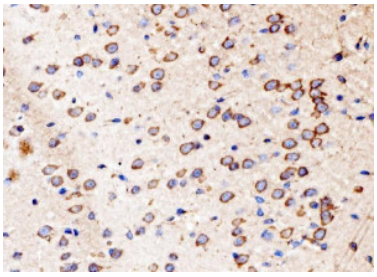
Kinectin 1 Antibody IHC Staining of Human Spleen Tissue. Immunohistochemical analysis of FFPE human spleen tissue using KTN1 Polyclonal Antibody. Brown DAB staining is visible in scattered cells throughout the splenic tissue, with predominantly cytoplasmic immunoreactivity against the blue hematoxylin counterstain. The staining varies among cellular populations, with regions showing relatively limited immunoreactivity.



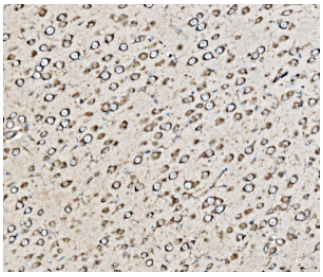
Kinectin 1 Antibody IHC Staining of Human Tonsil Tissue. Immunohistochemical analysis of FFPE human tonsil tissue using KTN1 Polyclonal Antibody. Brown DAB staining is distributed among lymphoid cells, with additional immunoreactivity visible in portions of the surrounding tissue. The staining is predominantly cytoplasmic and varies across the tissue section.



Kinectin 1 Antibody IHC Staining of Human Liver Cancer Tissue. Immunohistochemical analysis of FFPE human liver cancer tissue using KTN1 Polyclonal Antibody. Brown DAB staining is visible throughout the tumor epithelial structures, with cytoplasmic and peripheral cellular immunoreactivity surrounding the glandular spaces. The distribution is compatible with the membrane-associated and cytoplasmic localization expected for kinectin 1.



Kinectin 1 Antibody IHC Staining of Mouse Brain Tissue. Immunohistochemical analysis of FFPE mouse brain tissue using KTN1 Polyclonal Antibody. Brown DAB staining is prominent in numerous neuronal cell bodies, with cytoplasmic and peripheral cellular immunoreactivity visible against a lightly stained background. The pattern demonstrates KTN1-associated staining within neuronal populations.



Kinectin 1 Antibody IHC Staining of Rat Brain Tissue. Immunohistochemical analysis of FFPE rat brain tissue using KTN1 Polyclonal Antibody. Brown DAB staining is visible in numerous neuronal cell bodies and associated cellular processes. Immunoreactivity is concentrated around the cytoplasmic regions of neurons, with additional diffuse staining in portions of the surrounding neuropil.

Description

Kinectin 1 Antibody / KTN1 Polyclonal Antibody targets kinectin 1 (KTN1), a large integral membrane protein primarily associated with the endoplasmic reticulum (ER). Kinectin 1 was originally identified through its ability to interact with kinesin motor proteins, suggesting a role in linking intracellular membranes to microtubule-based transport machinery. The protein contains a membrane-associated N-terminal region and an extensive cytoplasmic domain with predicted coiled-coil structures. These features support interactions with molecular motors and other proteins involved in intracellular organization. KTN1 contributes to the structural and functional relationship between the endoplasmic reticulum, cytoskeleton, and cellular transport systems.

The interaction between kinectin 1 and kinesin has been investigated as a mechanism for connecting membrane-bound organelles to microtubule-dependent movement. Kinesin motors use energy derived from ATP hydrolysis to transport cellular components along microtubules, while membrane-associated proteins help determine their intracellular localization. Kinectin 1 has been proposed to function as a receptor or anchoring component for certain kinesin interactions. Its extended coiled-coil regions may provide structural flexibility and facilitate the assembly of protein complexes involved in membrane positioning and intracellular transport.

Beyond its association with molecular motors, KTN1 has been implicated in the organization of the endoplasmic reticulum and interactions with components of the protein synthesis machinery. Studies have identified associations between kinectin and translation elongation factors, suggesting a potential connection between ER-associated protein synthesis and intracellular membrane organization. Alternative splicing produces multiple KTN1 transcript variants, potentially contributing to differences in protein structure and interaction properties. The functional significance of individual variants remains an area of investigation, particularly regarding their roles in motor protein binding and intracellular localization.

Kinectin 1 is also relevant to research involving cytoskeletal dynamics, organelle positioning, and the coordination of intracellular transport with cellular activity. Its membrane-associated location places it at an interface between structural organization and molecular motor function. Research using Kinectin 1 Antibody can help characterize KTN1 expression and distribution in relation to endoplasmic reticulum organization, kinesin-associated transport, and the molecular mechanisms governing intracellular membrane dynamics.

Explore our selection of Cell Biology Antibodies for investigating endoplasmic reticulum organization, molecular motor proteins, and intracellular membrane transport.

Application Notes

Optimal dilution of the Kinectin 1 Antibody / KTN1 Polyclonal Antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids K283-K827) was used as the immunogen for the Kinectin 1 Antibody.

Storage

After reconstitution, the Kinectin 1 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Kinectin antibody, Kinectin 1 protein antibody, KTN1 protein antibody, Kinectin-1 antibody, Kinesin receptor antibody, Endoplasmic reticulum kinectin antibody, Kinectin membrane protein antibody, Kinectin kinesin-binding protein antibody, KTN1 cytoskeletal protein antibody, Kinectin 1 ER membrane antibody

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