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Dctn1 Antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI13359

Specification

Dctn1 Antibody - C-terminal region - Product Information

Application	**WB**
Primary Accession	P28023
Other Accession	NM_024130, NP_077044
Reactivity	**Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog**
Predicted	**Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**140kDa KDa**

Dctn1 Antibody - C-terminal region - Additional Information

Gene ID 29167

Other Names
Dynactin subunit 1, 150 kDa dynein-associated polypeptide, DAP-150, DP-150, p150-glued, Dctn1

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-Dctn1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
Dctn1 Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Dctn1 Antibody - C-terminal region - Protein Information

Name Dctn1

Function
Part of the dynactin complex that activates the molecular motor dynein for ultra-processive transport along microtubules (By similarity). Plays a key role in dynein-mediated retrograde transport of vesicles and organelles along microtubules by recruiting and tethering dynein to microtubules. Binds to both dynein and microtubules providing a link between specific cargos, microtubules and dynein. Essential for targeting dynein to microtubule plus ends, recruiting dynein to membranous cargos and enhancing dynein processivity (the ability to move along a microtubule for a long distance without falling off the track). Can also act as a brake to slow the dynein motor during motility along the microtubule. Can regulate microtubule stability by promoting microtubule

formation, nucleation and polymerization and by inhibiting microtubule catastrophe in neurons. Inhibits microtubule catastrophe by binding both to microtubules and to tubulin, leading to enhanced microtubule stability along the axon. Plays a role in metaphase spindle orientation. Plays a role in centriole cohesion and subdistal appendage organization and function. Its recruitment to the centriole in a KIF3A-dependent manner is essential for the maintenance of centriole cohesion and the formation of subdistal appendage. Also required for microtubule anchoring at the mother centriole. Plays a role in primary cilia formation (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:Q14203}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q14203}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:Q14203}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole {ECO:0000250|UniProtKB:Q14203}. Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:Q14203}. Nucleus envelope {ECO:0000250|UniProtKB:Q14203}. Cytoplasm, cell cortex {ECO:0000250|UniProtKB:Q14203}. Note=Localizes to microtubule plus ends. Localizes preferentially to the ends of tyrosinated microtubules Localization at centrosome is regulated by SLK-dependent phosphorylation. Localizes to centrosome in a PARKDA-dependent manner PLK1-mediated phosphorylation at Ser-179 is essential for its localization in the nuclear envelope. Localizes to the subdistal appendage region of the centriole in a KIF3A-dependent manner {ECO:0000250|UniProtKB:O08788, ECO:0000250|UniProtKB:Q14203}

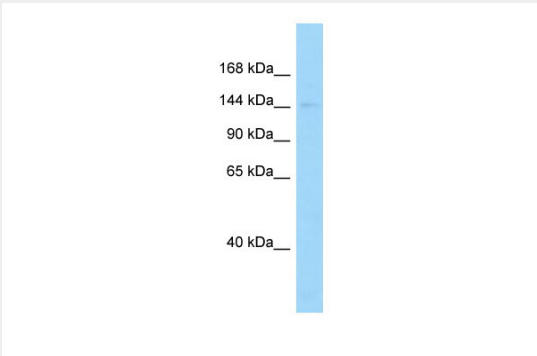
Tissue Location
Ubiquitous with a high level expression observed in the brain (at protein level).

Dctn1 Antibody - C-terminal region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Dctn1 Antibody - C-terminal region - Images



WB Suggested Anti-Dctn1 Antibody Titration: 1.0 µg/ml
Positive Control: Rat Thymus

Dctn1 Antibody - C-terminal region - References

Holzbaur E.L.F.,et al.Nature 351:579-583(1991).
Holzbaur E.L.F.,et al.Submitted (DEC-1996) to the EMBL/GenBank/DDBJ databases.
Yan S.,et al.J. Mol. Biol. 425:4249-4266(2013).