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Dctn1 Antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI13359

Product Information

Application	WB
Primary Accession	P28023
Other Accession	NM_024130, NP_077044
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	141930

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.

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).

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).

Images

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