

Rabbit DCTN1 Polyclonal Antibody | anti-DCTN1 antibody

DCTN1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326380	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

DCTN1; Polyclonal Antibody; DCTN1 Antibody; 150 kDa dynein associated polypeptide; 150 kDa dynein-associated polypeptide; DAP 150; DAP-150; DAP150; DCTN 1; DCTN1_HUMAN; DP 150; DP-150; DP150; Dynactin 1 (p150 Glued (Drosophila) homolog); Dynactin 1 (p150 glued homolog Drosophila); Dynactin 1; Dynactin subunit 1; Dynactin1; HMN7B; p135; p150 Glued (Drosophila) homolog; p150 glued; p150 glued homolog; p150(GLUED) DROSOPHILA HOMOLOG OF; p150-glued; p150glued; anti-DCTN1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	DCTN1 antibody detects endogenous levels of total DCTN1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1253
Applicable Applications for anti-DCTN1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human DCTN1
Subcellular Location	Cytoplasm. Cytoplasm > Cytoskeleton.
Tissue Specificity	Brain.
Predicted Cross Reactivity	Bovine, Horse, Dog, Xenopus
Similarity	Bovine (90%), Horse (100%), Dog (90%), Xenopus (80%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IF (Immunofluorescence)

AAA326380 staining HepG2 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



IHC (Immunohistochemistry)

AAA326380 at 1/100 staining Mouse liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis of extracts of Jurkat, using DCTN1 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-DCTN1 antibody	<p>Description: This gene encodes the largest subunit of dynactin, a macromolecular complex consisting of 10 subunits ranging in size from 22 to 150 kD. Dynactin binds to both microtubules and cytoplasmic dynein. Dynactin is involved in a diverse array of cellular functions, including ER-to-Golgi transport, the centripetal movement of lysosomes and endosomes, spindle formation, chromosome movement, nuclear positioning, and axonogenesis. This subunit interacts with dynein intermediate chain by its domains directly binding to dynein and binds to microtubules via a highly conserved glycine-rich cytoskeleton-associated protein (CAP-Gly) domain in its N-terminus. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms. Mutations in this gene cause distal hereditary motor neuronopathy type VIIB (HMN7B) which is also known as distal spinal and bulbar muscular atrophy (dSBMA). [provided by RefSeq, Oct 2008]</p> <p>Function: 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 (PubMed:25185702). 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 (PubMed:23874158). Plays a role in metaphase spindle orientation (PubMed:22327364). 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 (PubMed:23386061). Plays a role in primary cilia formation (PubMed:25774020). Subunit Structure: Monomer and homodimer (PubMed:23874158). Dynactin is a large macromolecular complex of at least 10 components; p150(glued) binds directly to microtubules and to cytoplasmic dynein. Interacts with the C-terminus of MAPRE1, MAPRE2 and MAPRE3. Interacts (via C-terminus) with SNX6. Interacts with CLN3, DYNAP, ECPAS and FBXL5. Interacts with MISP; this interaction regulates its distribution at the cell cortex. Interacts with CEP131. Interacts with CEP126 (PubMed:24867236). Interacts with CLIP1 (PubMed:17828275, PubMed:17828277, PubMed:26972003, PubMed:20679239). Interacts with dynein intermediate chain and dynein heavy chain (PubMed:25185702). Interacts with PLK1 (via POLO-box domain) (PubMed:20679239). Interacts with TBCB (PubMed:22777741). Binds preferentially to tyrosinated microtubules than to detyrosinated microtubules (PubMed:26972003, PubMed:26968983). Interacts with PARD6A (PubMed:20719959). Interacts with HPS6 (PubMed:25189619). Interacts with KIF3A. Interacts with BICD2 (By similarity). Interacts with DST (isoform 9) (By similarity). Interacts with DST (isoform 1) (By similarity). Interacts with BCCIP (isoform 2/alpha) (PubMed:28394342). Interacts with DCDC5 (PubMed:22159412).</p> <p>Post-translational Modifications: Ubiquitinated by a SCF complex containing FBXL5, leading to its degradation by the proteasome. Phosphorylation by SLK at Thr-145, Thr-146 and Thr-147 targets DCTN1 to the centrosome. It is uncertain if SLK phosphorylates all three threonines or one or two of them. PLK1-mediated phosphorylation at Ser-179 is essential for its localization in the nuclear envelope, promotes its dissociation from microtubules during early mitosis and positively regulates nuclear envelope breakdown during prophase.</p> <p>Similarity: The CAP-Gly domain is essential for interactions with microtubules and its binding partners and for its motion along the microtubules. Essential for its preferential binding to tyrosinated microtubules and for promoting the sustained interaction of the dynein motor with microtubules. Belongs to the dynactin 150 kDa subunit family.</p>
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NCBI AND UNIPROT INFORMATION

NCBI GI #	205277392
NCBI GeneID	1639
NCBI Accession #	NP_001128512.1
NCBI GenBank Nucleotide #	NM_001135040.2
UniProt Accession #	Q14203; O95296; Q6IQ37; Q9BRM9; Q9UIU1; Q9UIU2; A8MY36; B4DM45; E9PFS5; E9PGE1; G5E9H4
Molecular Weight	Observed: 142 kDa Predicted: 142 kDa
NCBI Official Full Name	dynactin subunit 1 isoform 3
NCBI Official Synonym Full Names	dynactin subunit 1
NCBI Official Symbol	DCTN1

NCBI Official Synonym Symbols	P135; DP-150; DAP-150
NCBI Protein Information	dynactin subunit 1
UniProt Protein Name	Dynactin subunit 1
UniProt Gene Name	DCTN1
UniProt Synonym Gene Names	DP-150

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/dctn1-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326380>