10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DCTN2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12893c

Product Information

Application	IHC-P, WB, E
Primary Accession	Q13561
Other Accession	Q6AYH5, Q99KJ8, Q3ZCF0, NP_006391.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19599
Calculated MW	44231
Antigen Region	192-219

Additional Information

Gene ID	10540
Other Names	Dynactin subunit 2, 50 kDa dynein-associated polypeptide, Dynactin complex 50 kDa subunit, DCTN-50, p50 dynamitin, DCTN2, DCTN50
Target/Specificity	This DCTN2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 192-219 amino acids from the Central region of human DCTN2.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DCTN2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DCTN2 (HGNC:2712)
Synonyms	DCTN50

Function	Part of the dynactin complex that activates the molecular motor dynein for ultra-processive transport along microtubules. In the dynactin soulder domain, binds the ACTR1A filament and acts as a molecular ruler to determine the length (By similarity). Modulates cytoplasmic dynein binding to an organelle, and plays a role in prometaphase chromosome alignment and spindle organization during mitosis. Involved in anchoring microtubules to centrosomes. May play a role in synapse formation during brain development (By similarity).
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Membrane; Peripheral membrane protein. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:A0A5G2QD80}

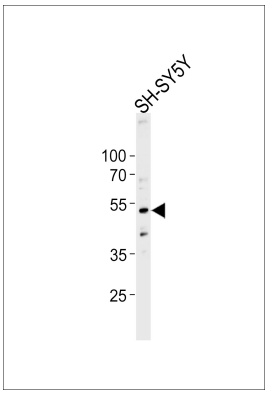
Background

This gene encodes a 50-kD subunit of dynactin, a macromolecular complex consisting of 10-11 subunits ranging in size from 22 to 150 kD. Dynactin binds to both microtubules and cytoplasmic dynein. It 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 is present in 4-5 copies per dynactin molecule. It contains three short alpha-helical coiled-coil domains that may mediate association with self or other dynactin subunits. It may interact directly with the largest subunit (p150) of dynactin and may affix p150 in place.

References

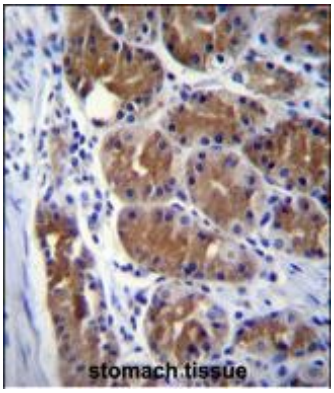
Jacquot, G., et al. J. Biol. Chem. 285(30):23019-23031(2010)
Inoue, M., et al. Genes Cells 13(8):905-914(2008)
Maier, K.C., et al. Traffic 9(4):481-491(2008)
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Camargo, L.M., et al. Mol. Psychiatry 12(1):74-86(2007)

Images



Western blot analysis of lysate from SH-SY5Y cell line, using DCTN2 Antibody (Center)(Cat. #AP12893c). AP12893c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

DCTN2 Antibody (Center) (Cat. #AP12893c)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of DCTN2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



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