

Product datasheet

info@arigobio.com

ARG40795 anti-DCTN1 / p150-glued antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes DCTN1 / p150-glued

Tested Reactivity Hu, Ms, Rat
Tested Application IP, WB
Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name DCTN1 / p150-glued

Species Human

Immunogen Recombinant fusion protein corresponding to aa. 945-1139 of Human DCTN1 (NP_001128513.1).

Conjugation Un-conjugated

Alternate Names P135; p150-glued; p135; DP-150; Dynactin subunit 1; 150 kDa dynein-associated polypeptide; DAP-150

Application Instructions

| Application table | Application | Dilution |
|-------------------|--|----------------|
| | IP | 1:50 - 1:100 |
| | WB | 1:500 - 1:2000 |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |
| Positive Control | U-251MG | |

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

DCTN1

Gene Full Name

dynactin 1

Background

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]

Function

Required for the cytoplasmic dynein-driven retrograde movement of vesicles and organelles along microtubules. Dynein-dynactin interaction is a key component of the mechanism of axonal transport of vesicles and organelles. [UniProt]

Calculated Mw

142 kDa

PTM

Ubiquitinated by a SCF complex containing FBXL5, leading to its degradation by the proteasome.

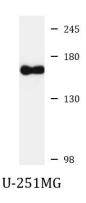
Phosphorylation by SLK at Thr-145, Thr-146 and Thr-147 targets DCTN1 to the centrosome. It is uncertain if SLK phosphorylates all three threonines or one or two of them. PLK1-mediated phosphorylation at Ser-179 is essential for its localization in the nuclear envelope, promotes its dissociation from microtubules during early mitosis and positively regulates nuclear envelope breakdown during prophase. [UniProt]

Cellular Localization

 $\label{thm:cytoskeleton} \textit{Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole, spindle, cell cortex.}$

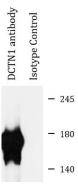
Nucleus envelope. [UniProt]

Images



ARG40795 anti-DCTN1 / p150-glued antibody WB image

Western blot: 25 μg of U-251MG cell lysate stained with ARG40795 anti-DCTN1 / p150-glued antibody at 1:1000 dilution.



ARG40795 anti-DCTN1 / p150-glued antibody IP image

Immunoprecipitation: 200 μg extracts of MCF7 cells were immunoprecipitated and stained with ARG40795 anti-DCTN1 / p150-glued antibody at 1:1000 dilution.