



Dynactin 1 Monoclonal Antibody

Catalog No	YP-Ab-02950
Isotype	IgG
Reactivity	Human;Mouse;Bovine;Pig
Applications	WB;IF
Gene Name	DCTN1
Immunogen	Purified recombinant human Dynactin 1 protein fragments expressed in E.coli.
Specificity	Dynactin 1 Monoclonal Antibody detects endogenous levels of Dynactin 1 protein.
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/1000 - 1/2000. Immunofluorescence: 1/100 - 1/500. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Dynactin 1;DCTN1;Dynactin subunit 1;150 kDa dynein-associated polypeptide; DAP-150;DP-150;p135;p150-glued
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Cytoplasm . Cytoplasm, cytoskeleton . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole . Cytoplasm, cytoskeleton, spindle . Nucleus envelope . Cytoplasm, cell cortex . Localizes to microtubule plus ends (PubMed:17828277, PubMed:22777741, PubMed:25774020). Localizes preferentially to the ends of tyrosinated microtubules (PubMed:26972003). Localization at centrosome is regulated by SLK-dependent phosphorylation (PubMed:23985322). Localizes to centrosome in a PARKDA-dependent manner (PubMed:20719959). Localizes to the subdistal appendage region of the centriole in a KIF3A-dependent manner (PubMed:23386061). PLK1-mediated phosphorylation at Ser-179 is essential for its localization in the nuclear
Tissue Specificity	Brain.



Function

disease: Defects in DCTN1 are the cause of progressive lower motor neuron disease (PLMND) [MIM:607641]. PLMND is a progressive dominant disease that has no sensory symptoms., 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., PTM: Phosphorylated., similarity: Belongs to the dynactin 150 kDa subunit family., similarity: Contains 1 CAP-Gly domain., subunit: 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., tissue specificity: Brain.,

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 neuropathy type VIIIB (HMN7B) which is also known as distal spinal and bulbar muscular atrophy (dSBMA). [

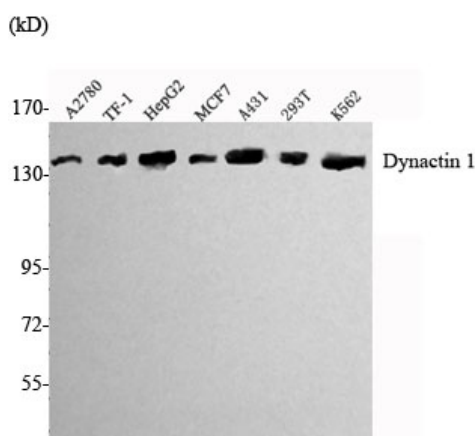
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using Dynactin 1 Monoclonal Antibody against A2780, TF-1, HepG2, MCF7, A431, K562 cell lysate.