Best Tools for immunology Research

Dynactin 1 Monoclonal Antibody

Catalog No :	YM1031
Reactivity :	Human;Mouse;Bovine;Pig
Applications :	WB;IF
Target :	Dynactin 1
Fields :	>>Vasopressin-regulated water reabsorption;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Pathways of neurodegeneration - multiple diseases;>>Salmonella infection
Gene Name :	DCTN1
Protein Name :	Dynactin subunit 1
Human Gene Id :	1639
Human Swiss Prot No :	Q14203
Mouse Gene Id :	13191
Mouse Swiss Prot No :	O08788
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 :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:1000 - 1:2000. IF 1:100 - 1:500. Not yet tested in other applications.
Purification :	Affinity purification
Concentration :	1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 142kD

Cell Pathway : Huntington's disease;

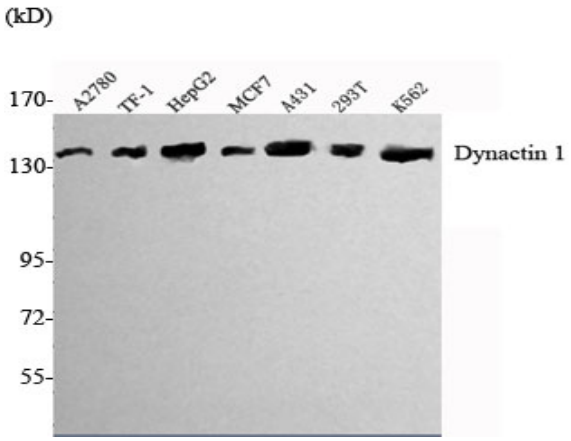
Background : This gene encodes the largest subunit of dynactin, a macromolecular complex consisting of 10 subunits ranging in size from 22 to 150 kD. Dynactin binds to both microtubules and cytoplasmic dynein. Dynactin is involved in a diverse array of cellular functions, including ER-to-Golgi transport, 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). [

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.,

Subcellular Location : 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

Expression : Brain.

Products Images



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