



Anti-Dynactin subunit 1 Antibody

Alternative Names: DAP-150, DP-150, P135, 150 kDa dynein-associated polypeptide, p150-glued

Catalogue Number: AB19-10092-50ug

Size: 50 µg

Background Information

Dynactin subunit 1 (DCTN1) is the largest (approximately 150 kD) subunit of dynactin, a macromolecular complex consisting of multiple subunits ranging in from 22 to 150 kD. Dynactin binds to both microtubules and cytoplasmic dynein and is involved in a diverse range of cellular functions, including ER-to-Golgi transport, the centripetal movement of lysosomes and endosomes, spindle formation, chromosome movement, nuclear positioning, and axonogenesis. DCTN1 contains N-terminal CAP-Gly and basic domains, followed by the coiled-coil (CC) 1 and 2 domains [1]. The CAP-Gly and basic domains form the microtubule binding domain (MTBD) [2] and the CC1 and CC2 domains mediate the interactions with dynein intermediate chain (DIC) and the other dynactin subunits [1]. The MTBDs of DCTN1 allow microtubule binding during spindle formation and chromosome movement making them essential for cell division[3], Mutations in the DCTN1 gene are associated with amyotrophic lateral sclerosis (ALS) and distal hereditary motor neuronopathy type VIIB (HMN7B/spinal and bulbar muscular atrophy/dSBMA).

Product Information

Antibody Type:	Polyclonal	Host:	Rabbit
Isotype:	IgG	Species Reactivity:	Human, Mouse, Rat
Immunogen:	Partial length recombinant human DCTN1 from the C-terminal region		
Format:	50 µg in 50 µl PBS with 0.02% sodium azide, 50% glycerol, pH7.3.		
Storage Conditions:	Store at -20°C. Avoid freeze / thaw cycles.		
Applications:	WB IF IP WB 1:500-2000. IF 1:20-100. IP 1:50-100.		

Additional Information

Subcellular location:	Cytoplasm cytoskeleton	MW:	142kDa (Intended as a general guide and does not allow for all isoforms and species variations)
Gene ID	1639	Uniprot ID:	Q14203



References

- 1: Schroer TA. Dynactin. *Annu Rev Cell Dev Biol.* 2004;20:759–79.
- 2: Culver-Hanlon TL, Lex SA, Stephens AD, Quintyne NJ, King SJ. A microtubule-binding domain in dynactin increases dynein processivity by skating along microtubules. *Nat Cell Biol.* 2006;8(3):264–70.
- 3: Robinson RW, Snyder JA. Colocalization studies of Arp1 and p150Glued to spindle microtubules during mitosis: the effect of cytochalasin on the organization of microtubules and motor proteins in PtK1 cells. *Cell Biol Int.* 2006;30(7):631–9.