

DCTN4 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO2291a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q9UJW0
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3G9D7
Isotype	IgG1
Calculated MW	52337
Description	Dynactin 4 could have a dual role in dynein targeting and in ACTR1A/Arp1 subunit of dynactin pointed-end capping. Could be involved in ACTR1A pointed-end binding and in additional roles in linking dynein and dynactin to the cortical cytoskeleton. The dynactin complex binds cargo, such as vesicles and organelles, to cytoplasmic dynein for retrograde microtubule-mediated trafficking and could feasibly be involved in the copper-regulated trafficking of ATP7B.
Immunogen	Purified recombinant fragment of human DCTN4 (AA: 57-298) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	51164
Other Names	Dynactin subunit 4, Dyn4, Dynactin subunit p62, DCTN4
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DCTN4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DCTN4 (HGNC:15518)
-------------	--------------------------------------

Function	Part of the dynactin complex that activates the molecular motor dynein for ultra-processive transport along microtubules.
Cellular Location	Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, stress fiber {ECO:0000250 UniProtKB:Q9QUR2}. Cytoplasm, cell cortex {ECO:0000250 UniProtKB:Q9QUR2}. Cytoplasm, myofibril, sarcomere {ECO:0000250 UniProtKB:Q8CBY8}. Note=Has a punctate cytoplasmic distribution as well as centrosomal distribution typical of dynactin (PubMed:10671518). Overexpression in cultured mammalian cells revealed colocalization with cortical actin, stress fibers, and focal adhesion sites, sites of potential interaction between microtubules and the cell cortex (By similarity). In skeletal muscles, costamere localization requires the presence of ANK2 (By similarity) {ECO:0000250 UniProtKB:Q8CBY8, ECO:0000250 UniProtKB:Q9QUR2, ECO:0000269 PubMed:10671518}

References

1.Cell. 2008 Dec 26;135(7):1189-200. 2.J Biol Chem. 2006 May 19;281(20):14006-14.

Images

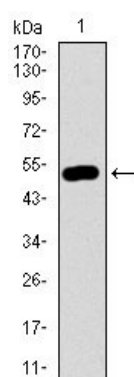


Figure 1: Western blot analysis using DCTN4 mAb against human DCTN4 recombinant protein. (Expected MW is 53.2 kDa)

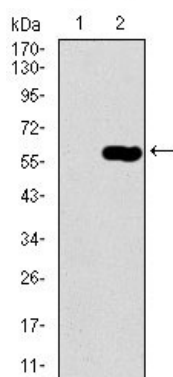


Figure 2: Western blot analysis using DCTN4 mAb against HEK293 (1) and DCTN4 (AA: ***)-hIgGFc transfected HEK293 (2) cell lysate.

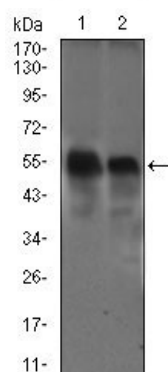


Figure 3: Western blot analysis using DCTN4 mouse mAb against Raw264.7 (1) and NIH3T3 (2) cell lysate.

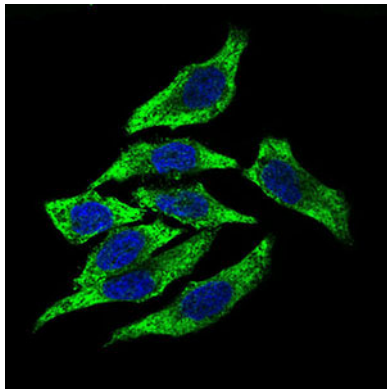


Figure 4: Immunofluorescence analysis of HepG2 cells using DCTN4 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

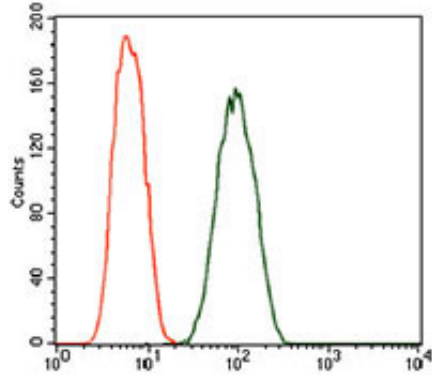


Figure 5: Flow cytometric analysis of A549 cells using DCTN4 mouse mAb (green) and negative control (red).

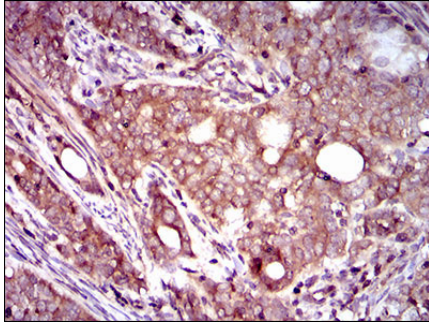


Figure 6: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using DCTN4 mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.