

DCTN4 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2291a**Specification****DCTN4 Antibody - Product Information**

Application	WB, IHC, FC, ICC, E
Primary Accession	O9UJW0
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	52.3kDa KDa

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

DCTN4 Antibody - 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.

DCTN4 Antibody - Protein Information

Name DCTN4 ([HGNC:15518](#))

Function

Part of the dynactin complex that activates the molecular motor dynein for ultra-processive transport along microtubules.

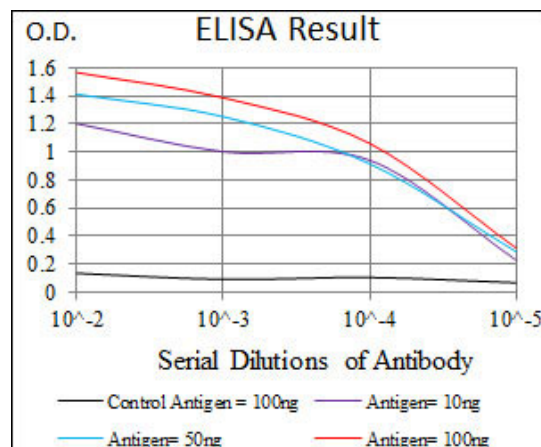
Cellular Location

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}

DCTN4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



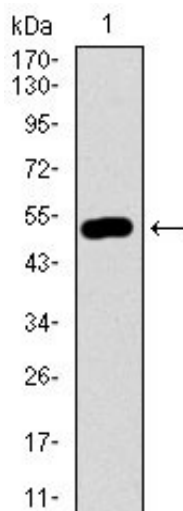


Figure 1: Western blot analysis using DCTN4 mAb against human DCTN4 recombinant protein. (Expected MW is 53.2 kDa)

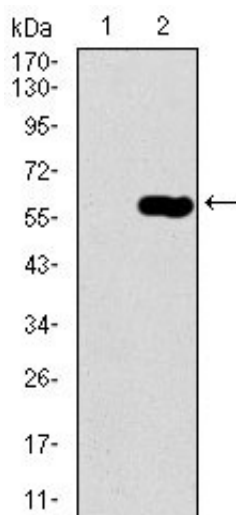


Figure 2: Western blot analysis using DCTN4 mAb against HEK293 (1) and DCTN4 (AA: ***)-hlgGfC transfected HEK293 (2) cell lysate.

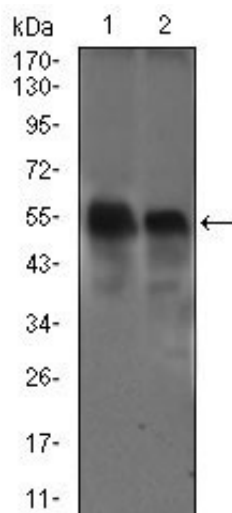


Figure 3: Western blot analysis using DCTN4 mouse mAb against Raw264.7 (1) and NIH3T3 (2) cell lysate.

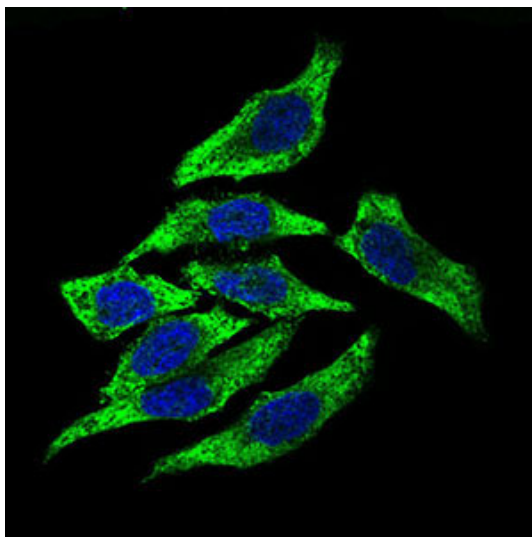


Figure 4: Immunofluorescence analysis of HepG2 cells using DCTN4 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

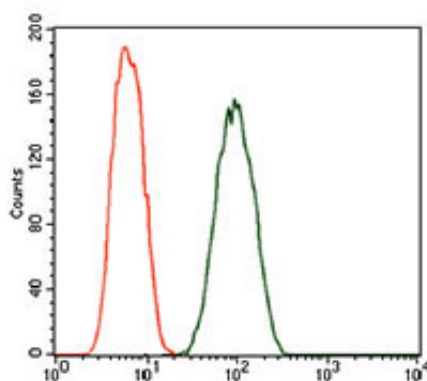


Figure 5: Flow cytometric analysis of A549 cells using DCTN4 mouse mAb (green) and negative control (red).

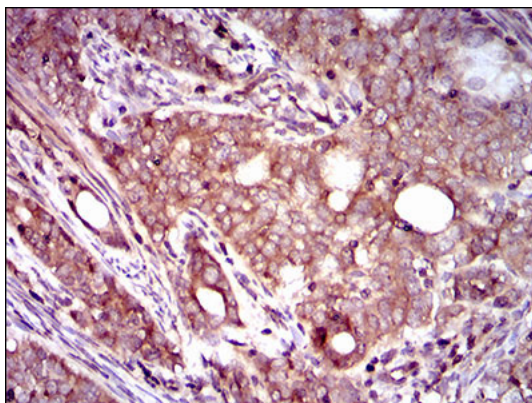


Figure 6: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using DCTN4 mouse mAb with DAB staining.

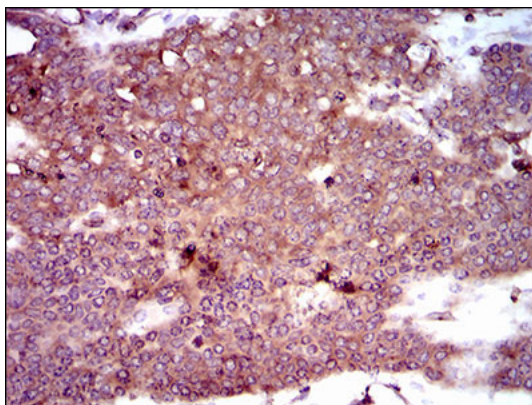


Figure 7: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using DCTN4 mouse mAb with DAB staining.

DCTN4 Antibody - References

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