

DCTN2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant DCTN2. Catalog # AT1722a

Product Information

Application WB, IF, E
Primary Accession Q13561
Other Accession BC000718
Reactivity Human
Host mouse
Clonality monoclonal
Isotype IgG1 lambda

Clone Names 2G7 Calculated MW 44231

Additional Information

Gene ID 10540

Other Names Dynactin subunit 2, 50 kDa dynein-associated polypeptide, Dynactin complex

50 kDa subunit, DCTN-50, p50 dynamitin, DCTN2, DCTN50

Target/Specificity DCTN2 (AAH00718, 302 a.a. ~ 401 a.a) partial recombinant protein with GST

tag. MW of the GST tag alone is 26 KDa.

Dilution WB~~1:500~1000 IF~~1:50~200 E~~N/A

Format Clear, colorless solution in phosphate buffered saline, pH 7.2.

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions DCTN2 Antibody (monoclonal) (M01) is for research use only and not for use

in diagnostic or therapeutic procedures.

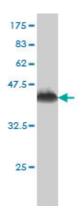
Background

This gene encodes a 50-kD subunit of dynactin, a macromolecular complex consisting of 10-11 subunits ranging in size from 22 to 150 kD. Dynactin binds to both microtubules and cytoplasmic dynein. It 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 is present in 4-5 copies per dynactin molecule. It contains three short alpha-helical coiled-coil domains that may mediate association with self or other dynactin subunits. It may interact directly with the largest subunit (p150) of dynactin and may affix p150 in place.

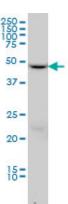
References

Molecular and functional basis for the scaffolding role of the p50/dynamitin subunit of the microtubule-associated dynactin complex. Jacquot G, et al. J Biol Chem, 2010 Jul 23. PMID 20463029. Proteomic analysis reveals Hrs ubiquitin-interacting motif-mediated ubiquitin signaling in multiple cellular processes. Pridgeon JW, et al. FEBS J, 2009 Jan. PMID 19019082. N-terminal region of ZW10 serves not only as a determinant for localization but also as a link with dynein function. Inoue M, et al. Genes Cells, 2008 Aug. PMID 18782227. Dynamitin mutagenesis reveals protein-protein interactions important for dynactin structure. Maier KC, et al. Traffic, 2008 Apr. PMID 18182012. GSK-3beta-regulated interaction of BICD with dynein is involved in microtubule anchorage at centrosome. Fumoto K, et al. EMBO J, 2006 Dec 13. PMID 17139249.

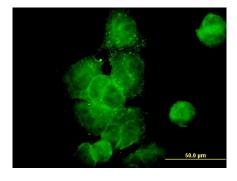
Images



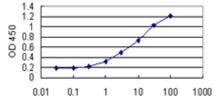
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa).



DCTN2 monoclonal antibody (M01), clone 2G7 Western Blot analysis of DCTN2 expression in MCF-7 ((Cat # AT1722a)



Immunofluorescence of monoclonal antibody to DCTN2 on MCF-7 cell . [antibody concentration 10 ug/ml]



Recombinant ProteinConcentration(nglnl)

Detection limit for recombinant GST tagged DCTN2 is approximately 0.3ng/ml as a capture antibody.

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