

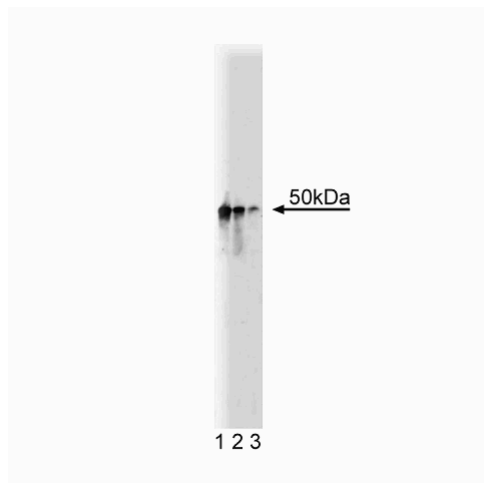
Technical Data Sheet

Purified Mouse Anti-Dynactin p50**Product Information**

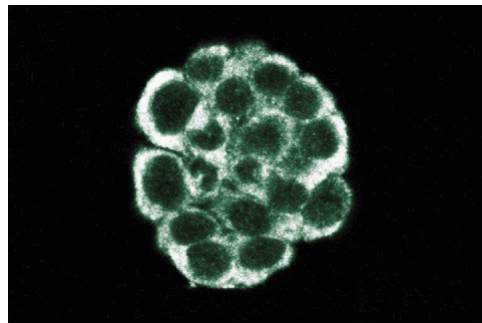
Material Number:	611003
Size:	150 µg
Concentration:	250 µg/ml
Clone:	25/Dynactin p50
Immunogen:	Human Dynactin p50 aa. 55-196
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Rat, Mouse, Fly
Target MW:	50 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Dyneins are ubiquitous, multimeric proteins that are responsible for minus end-directed microtubule-based organelle transport. They are divided into two classes, cytosolic and axonemal. The activity of cytosolic dynein is regulated by the multiprotein dynactin complex with which it co-purifies. Dynactin is composed of at least nine polypeptides with p50 being the second most abundant subunit. The complex consists of an F-actin-like core filament of actin-related protein Arp1, a heterodimer that acts as a cap at one end, and a 62kDa subunit at the other end. p150[glued] is the largest subunit of the complex. The precise function of dynactin remains to be determined, but it may be recruited to prometaphase kinetochores to assist in alignment and spindle organization during mitosis. Additionally, dynactin localizes at the tail of cytosolic dynein and activates dynein-mediated vesicle movement. Therefore, dynactin may function to anchor or target dynein to the kinetochore during mitosis.



Western blot analysis of Dynactin p50 on Jurkat cell lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of anti-Dynactin p50.



Immunofluorescent staining of WDR cells.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

Application Notes**Application**

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD



Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharming/en/protocols/Western_Blotting.shtml.

Suggested Companion Products

Catalog Number	Name	Size	Clone
611451	Jurkat Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Burkhardt JK, Echeverri CJ, Nilsson T, Vallee RB. Overexpression of the dynamin (p50) subunit of the dynactin complex disrupts dynein-dependent maintenance of membrane organelle distribution. *J Cell Biol.* 1997; 139(2):469-484.(Biology)

Echeverri CJ, Paschal BM, Vaughan KT, Vallee RB. Molecular characterization of the 50-kD subunit of dynactin reveals function for the complex in chromosome alignment and spindle organization during mitosis. *J Cell Biol.* 1996; 132(4):617-633.(Biology)

Holleran EA, Ligon LA, Tokito M, Stankewich MC, Morrow JS, Holzbaur EL. beta III spectrin binds to the Arp1 subunit of dynactin. *J Biol Chem.* 2001; 276(39):36598-36605.(Clone-specific: Immunoprecipitation, Western blot)

Kuo MT, Liu Z, Wei Y. Induction of human MDR1 gene expression by 2-acetylaminofluorene is mediated by effectors of the phosphoinositide 3-kinase pathway that activate NF-kappaB signaling. *Oncogene.* 2002; 21(13):1945-1954.(Clone-specific: Western blot)

Starr DA, Williams BC, Hays TS, Goldberg ML. ZW10 helps recruit dynactin and dynein to the kinetochore. *J Cell Biol.* 1998; 142(3):763-764.(Biology)