

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human Dynactin Subunit 1/DCTN1 in direct ELISAs, and huamn and mouse DCTN1 in Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human DCTN2 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 705007
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Dynactin Subunit 1/DCTN1 Ala1145-Ser1278 Accession # Q14203
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Dynactin subunit 1 (DCTN1; also DAP-150, p150-1A and p150glued) is a 140-150 kDa member of the dynactin 150 kDa subunit family of proteins. It is a noncovalently-linked homodimer that represents the largest subunit of the neuronal dynactin complex. DCTN1 serves as a bridge that binds dynein to microtubules. This facilitates the transport of molecules along microtubules by the motor molecule dynein. Human DCTN1 is 1278 amino acids (aa) in length. It possesses an N-terminal microtubule-association region that shows a CAP-Gly domain (aa 48-90) plus a BMBD segment (aa 115-155), and two coiled-coil domains that mediate dimerization (aa 213-547 and 943-1049). There are multiple splice variants. Two are 150 kDa in size; one is widely expressed (p150-1B) and shows a deletion of aa 132-151, while a second is rare (p150-1AB) and shows a deletion of aa 132-138. A third variant is 135 kDa in size and possesses a four aa substitution for aa 1-138. Other splice forms possess alternative start sites at Met19 and Met265 that may be coupled to a deletion of aa 1066-1070 and/or a 42 aa substitution for aa 1066-1278. Over aa 1145-1278, human DCTN1 shares 97% and 93% aa identity with mouse and rat DCTN1, respectively.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.