

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Dynactin Subunit 1/DCTN1 in direct ELISAs and human, mouse and rat Dynactin Subunit 1/DCTN1 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Dynactin Subunit 1/DCTN1 Ala1145-Ser1278 Accession # Q14203
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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.
Immunohistochemistry	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 145-150 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.

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