

## DESCRIPTION

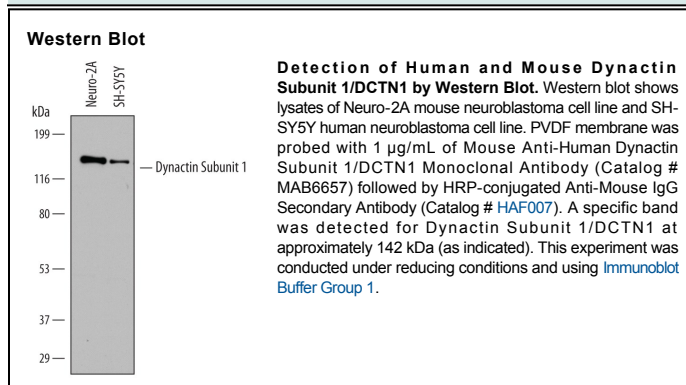
<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human Dynactin Subunit 1/DCTN1 in direct ELISAs, and human and mouse DCTN1 in Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human DCTN2 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 705007
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Dynactin Subunit 1/DCTN1 Ala1145-Ser1278 Accession # Q14203
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.