

Datasheet for ABIN968918
anti-Dynactin 1 antibody (AA 3-202)[2 Images](#)[2 Publications](#)[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	Dynactin 1 (DCTN1)
Binding Specificity:	AA 3-202
Reactivity:	Human, Mouse, Rat, Dog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Dynactin 1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), BioImaging (BI)

Product Details

Immunogen:	Rat p150 [Glued] aa. 3-202
Clone:	12-P150GLUED
Isotype:	IgG1
Cross-Reactivity:	Mouse (Murine), Human, Dog (Canine)
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Please refer to us for technical protocols.3. 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.4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	Dynactin 1 (DCTN1)
Alternative Name:	p150 Glued (DCTN1 Products)
Background:	<p>P150 [Glued] was identified as a polypeptide associated with cytoplasmic dynein, the minus-end-directed microtubule-based motor protein. p150 [Glued] is also a member of the oligomeric dynactin complex. Dynactin mediates dynein-driven vesicle motility, as well as lower eukaryote nuclear transport. p150 [Glued] bears significant homology to the product of the Glued gene in Drosophila. It has been shown in vitro to be a required activator of dynein-mediated transport along microtubules. The p150 [Glued] component of the dynactin complex binds to microtubules and the actin-like protein Centractin (Arp-1), another member of the dynactin complex. In the developing rat, p150 [Glued] is expressed at high levels in neural tissue. Microtubule binding assays with selected constructs of p150 [Glued] indicate that amino acids 39-150 are required for microtubule association.</p>
Molecular Weight:	150 kDa
Pathways:	M Phase , ER-Nucleus Signaling

Application Details

Application Notes:	<p>Methanol Procedure for a 96 well plate: Remove media from wells. Add 100 µl/well fresh 3.7% Formaldehyde in PBS. Incubate for 10 minutes at room temperature (RT). Flick out and add 100 µl/well 90% methanol. Incubate for 5 minutes at RT. Flick out and wash twice with PBS. Flick out PBS and add 100 µl/well blocking buffer (3% FBS in PBS). Incubate for 30 minutes at RT. Flick out and add diluted antibody (diluted in blocking buffer). Incubate for 1 hour at RT. Wash three times with PBS. Flick out PBS and add second step reagent. Incubate for 1 hour at RT. Wash three times with PBS.</p> <p>Triton-X 100 Procedure for a 96 well plate: Remove media from wells. Add 100 µl/well fresh 3.7% Formaldehyde in PBS. Incubate for 10 minutes at room temperature (RT). Flick out and add 100 µl/well 0.1% Triton-X 100. Incubate for 5 minutes at RT. Flick out and wash twice with PBS. Flick out PBS and add 100 µl/well blocking buffer (3% FBS in PBS). Incubate for 30 minutes at RT. Flick out and add diluted antibody (diluted in blocking buffer). Incubate for 1 hour at RT. Flick out and wash three times with PBS. Flick out and add second step reagent.</p>
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Application Details

Incubate for 1 hour at RT. Flick out and wash three times with PBS.

Comment: Related Products: ABIN968545, ABIN967389

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 250 µg/mL

Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store undiluted at -20° C.

Publications

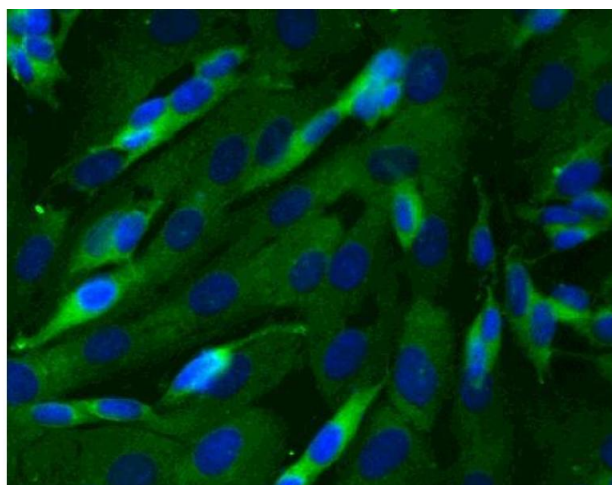
Product cited in: Waterman-Storer, Karki, Holzbaur: "The p150Glued component of the dynactin complex binds to both microtubules and the actin-related protein centractin (Arp-1)." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 92, Issue 5, pp. 1634-8, (1995) ([PubMed](#)).

Holzbaur, Hammarback, Paschal, Kravit, Pfister, Vallee: "Homology of a 150K cytoplasmic dynein-associated polypeptide with the Drosophila gene Glued." in: **Nature**, Vol. 351, Issue 6327, pp. 579-83, (1991) ([PubMed](#)).



Western Blotting

Image 1. Western blot analysis of p150 [Glued] on a rat cerebrum lysate (left). Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti- p150 [Glued] antibody.



Immunofluorescence

Image 2. Immunofluorescent staining of SK-N-SH cells (Human neuroblastoma, ATCC HTB-11) (right). Cells were seeded in collagen coated 384-well imaging microplates at ~ 8,000 cells per well. After overnight incubation, cells were stained using the Triton-X 100 fix/perm protocol with the mouse anti- p150 [Glued] antibody and counter-stained with Hoechst 33342 (pseudo-colored blue). The second step reagent used was Alexa Fluor® 488 goat anti-mouse Ig (pseudo-colored green) (Invitrogen). The images were captured on a BD Pathway™ 855 or 435 Bioimager system using a 20x objective and merged using BD Attovision™ software. This antibody also stained SH-SY5Y (Human neuroblastoma, ATCC CRL-2266) and C6 (Rat glioma, ATCC CCL-107) cells using both the Triton-X 100 and methanol fix/perm protocols.