DCTN1 Protein, Human (His-SUMO)

Cat. No.:	HY-P71542
Synonyms:	150kDa dynein associated polypeptide; 150kDa dynein-associated polypeptide; DAP 150; DAP-150; DAP150; DCTN 1; DCTN1; DCTN1_HUMAN; DP 150; DP-150; DP150; Dynactin 1 (p150 Glued (Drosophila) homolog); Dynactin 1 (p150 glued homolog Drosophila); Dynactin 1; Dynactin subunit 1; Dynactin1; HMN7B; p135; p150 Glued (Drosophila) homolog ; p150 glued; p150 glued homolog; p150(GLUED) DROSOPHILA HOMOLOG OF; p150-glued; p150glued
Species:	Human
Source:	E. coli
Accession:	Q14203 (213P-547Q)
Gene ID:	1639
Molecular Weight:	Approximately 55.2 kDa

PROPERTIES

AA Sequence	P S K E E E G L R A Q V R D L E E K L E T L R L K R A E D K A K L K E L E K H K I Q L E Q V Q E W K S K M Q E Q Q A D L Q R R L K E A R K E A K E A L E A K E R Y M E E M A D T A D A I E M A T L D K E M A E E R A E S L Q Q E V E A L K E R V D E L T T D L E I L K A E I E E K G S D G A A S S Y Q L K Q L E E Q N A R L K D A L V R M R D L S S S E K Q E H V K L Q K L M E K K N Q E L E V V R Q Q R E R L Q E E L S Q A E S T I D E L K E Q V D A A L G A E E M V E M L T D R N L N L E E K V R E L R E T V G D L E A M N E M N D E L Q E N A R E T E L E L R E Q L D M A G A R V R E A Q K R V E A A Q E T V A D Y Q Q T I K K Y R Q L T A H L Q D V N R E L T N Q Q E A S V E R Q Q Q
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	DCTN1 protein plays a pivotal role in intracellular transport as a key component of the dynactin complex, orchestrating dynein-mediated retrograde transport along microtubules. It acts by recruiting and tethering dynein to microtubules,

facilitating the efficient movement of vesicles and organelles. Beyond its role in transport, DCTN1 regulates microtubule stability by promoting polymerization and inhibiting catastrophe, impacting processes such as spindle orientation, centriole cohesion, and primary cilia formation. Additionally, DCTN1 serves as a molecular brake to modulate the speed of dynein motors during microtubule motility. Its interactions with various proteins, including MAPRE family members, dynein components, and regulatory factors like PLK1 and BCCIP, underscore its multifaceted involvement in cellular processes crucial for proper organelle dynamics and microtubule organization.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA