
Product Data Sheet

Product Name: DCTN2 (1-403) Human
 Cat. No.: GP23303
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Dynactin 2 (P50); 50 KDa Dynein-Associated Polypeptide; Dynactin Complex 50 KDa Subunit; P50 Dynamitin; DCTN50; 50 KD Dynein-Associated Polypeptide; Epididymis Secretory Protein Li 77; Dynactin Complex 50 KD Subunit; DYNAMITIN; HEL-S-77; DCTN-50; RBP50.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MGSMADPKYA DLPGIARNEP DVYETSDLPE DDQAEFDAEL EELTSTSVEH IIVNPNAAYD KFKDKRVGTK GLDFSDRIGK TKRTGYESGE YEMLGEGLV KETPQQKYQR LLHEVQELTT EVEKIKTTVK ESATEEKLTP VLLAKQLAAL KQQLVASHLE KLLGPDAAIN LTDPDGALAK RLLLQLEATK NSKGGSGGKT TGTPPDSSLV TYELHSRPEQ DKFSQAAKVA ELEKRLTELE TAVRCDQDAQ NPLSAGLQGA CLMETVELLQ AKVSALDLAV LDQVEARLQS VLGKVNEIAK HKASVEDADT QSKVHQLYET IQRWSPIAST LPELVQRLVT IKQLHEQAMQ FGQLLTHLDT TQQMIANSLK DNTLLLTQVQ TTMRENLATV EGNFASIDER MKKLGK		
Formulation	DCTN2 protein solution (0.5mg/ml) containing 20mM Tris-HCl (pH8.0), 10% glycerol, 0.15M NaCl and 1mM DTT.		

Introduction

DCTN2 is a 50kDa subunit of dynactin, which is a macromolecular complex consisting of 10-11 subunits ranging in size from 22 to 150 kDa. Dynactin binds to both microtubules and cytoplasmic dynein. Dynactin is involved in a various cellular functions, including ER-to-Golgi transport, the centripetal movement of lysosomes and endosomes, spindle formation, chromosome movement, nuclear positioning, and axonogenesis. The DCTN2 subunit is present in 4-5 copies per dynactin molecule. DCTN2 is comprised of 3 short alpha-helical coiled-coil domains which mediate association with self or other dynactin subunits. DCTN2 interacts directly with the largest subunit (p150) of dynactin and is able

Caution: Product has not been fully validated for medical applications. For research use only.

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to affix p150 in place. DCTN2 modulates cytoplasmic dynein binding to an organelle, and plays a part in prometaphase chromosome alignment and spindle organization during mitosis. DCTN2 is involved in anchoring microtubules to centrosomes. DCTN2 has a role in synapse formation during brain development.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

Dynactin 2 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 426 amino acids (1-403 a.a) and having a molecular mass of 46.9kDa. DCTN2 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

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