

---

**Product Data Sheet**


---

Product Name: DCTN2 (1-401) Human  
 Cat. No.: GP23302  
 Batch No.: 1

**Product Data**

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	DCTN2; Dynactin 2 (P50); DCTN50; Dynactin Complex 50 KDa Subunit; 50 KDa Dynein-Associated Polypeptide; P50 Dynamitin; 50 KD Dynein-Associated Polypeptide; DYNAMITIN; HEL-S-77; RBP50; Dynactin Complex 50 KD Subunit; Dynactin Subunit 2; Epididymis Secretory Protein Li 77; DCTN-50.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MGSMADPKYA DLPGIARNEP DVYETSDLPE DDQAEFDAEE LTSTSVEHII VNPNAAYDKF KDKRVGKGL DFSDRIGKTK RTGYESGEYE MLGEGGLGVKE TPQQKYQRLL HEVQELTTEV EKIKTTVKES ATEEKLTPLV LAKQLAALKQ QLVASHLEKL LGPDAAINLT DPDGALAKRL LLQLEATKNS KGGSGGKTTG TPPDSSLVTY ELHSRPEQDK FSQAAKVAEL EKRLTELETA VRCDQDAQNP LSAGLQGACL METVELLQAK VSALDLAVLD QVEARLQSVL GKVNEIAKHK ASVEDADTQS KVHQLYETIQ RWSPIASTLP ELVQRLVTIK QLHEQAMQFG QLLTHLDTTQ QMIANSLKDN TLLTQVQTT MRENLATVEG NFASIDERMK KLGK.		
Formulation	DCTN2 protein solution (0.5mg/ml) containing 20mM Tris-HCl (pH8.0), 20% 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

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---

## Product Data Sheet

---

subunits. DCTN2 interacts directly with the largest subunit (p150) of dynactin and is able 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 424 amino acids (1-401 a.a) and having a molecular mass of 46.6kDa. DCTN2 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA