

## Product datasheet for TP314771M

## OriGene Technologies, Inc.

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## Dynamitin (DCTN2) (NM\_006400) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human dynactin 2 (p50) (DCTN2), 100 μg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC214771 representing NM\_006400 or AA Sequence: Red=Cloning site Green=Tags(s)

MADPKYADLPGIARNEPDVYETSDLPEDDQAEFDAFAQELEELTSTSVEHIIVNPNAAYDKFKDKRVGTK GLDFSDRIGKTKRTGYESGEYEMLGEGLGVKETPQQKYQRLLHEVQELTTEVEKIKTTVKESATEEKLTP VLLAKQLAALKQQLVASHLEKLLGPDAAINLTDPDGALAKRLLLQLEATKNSKGGSGGKTTGTPPDSSLV TYELHSRPEQDKFSQAAKVAELEKRLTELETAVRCDQDAQNPLSAGLQGACLMETVELLQAKVSALDLAV LDQVEARLQSVLGKVNEIAKHKASVEDADTQSKVHQLYETIQRWSPIASTLPELVQRLVTIKQLHEQAMQ FGQLLTHLDTTQQMIANSLKDNTTLLTQVQTTMRENLATVEGNFASIDERMKKLGK

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Tag: C-Myc/DDK

**Predicted MW:** 44.6 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Bioactivity:** Co-immunoprecipitation (PMID: <u>27857681</u>)

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 006391





**Locus ID:** 10540

**UniProt ID:** <u>Q13561</u>, <u>V9HW58</u>

RefSeq Size: 1757
Cytogenetics: 12q13.3
RefSeq ORF: 1218

Synonyms: DCTN50; DYNAMITIN; HEL-S-77; RBP50

Summary: This gene encodes a 50-kD subunit of dynactin, a macromolecular complex consisting of 10-11

subunits ranging in size from 22 to 150 kD. Dynactin binds to both microtubules and

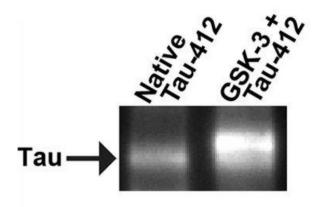
cytoplasmic dynein. It is involved in a diverse array of cellular functions, including ER-to-Golgi

transport, the centripetal movement of lysosomes and endosomes, spindle formation, chromosome movement, nuclear positioning, and axonogenesis. This subunit is present in 4-5 copies per dynactin molecule. It contains three short alpha-helical coiled-coil domains that may mediate association with self or other dynactin subunits. It may interact directly with the largest subunit (p150) of dynactin and may affix p150 in place. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by

RefSeq, May 2012]

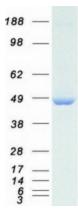
**Protein Pathways:** Huntington's disease

## **Product images:**



Tau-dynactin co-immunoprecipitation indicates that hyperphosphorylation of tau increases its affinity toward dynactin-2. Dynactin-2 (OriGene [TP314771]), pre-incubated with Dynabeads-G and an anti-dynactin-2 antibody, were incubated with native or hyperphosphorylated tau (via reaction with GSK-3) and the pulldown samples were analyzed with Western blot through a Tau antibody. Figure cited from Front Neurosci, PMID: 27857681





Coomassie blue staining of purified DCTN2 protein (Cat# [TP314771]). The protein was produced from HEK293T cells transfected with DCTN2 cDNA clone (Cat# [RC214771]) using MegaTran 2.0 (Cat# [TT210002]).