

## Product datasheet for TP314771

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

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human dynactin 2 (p50) (DCTN2), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC214771 representing NM_006400 Red=Cloning site Green=Tags(s)

MADPKYADLPGIARNEPDVYETSDLPEDDQAEFDFAFAQELEELTSTSVEHIIVNPNAAYDKFKDKRVGTK  
GLDFSDRIGKTKRTGYESGEYEMLGEGLVKQETPQQKYQRLLHEVQELTTEVEKIKTTVKESATEEKLTP  
VLLAKQLAALKQQLVASHLEKLLGPDAAINLTDPDGALAKRLLQLEATKNSKGGSGGKTTGTPPDSSLV  
TYELHSRPEQDKFSQAAKVAELEKRLTELETAVRCDQDAQNPLSAGLQGA CLMETVELLQAKV SALDLAV  
LDQVEARLQSVLGKVNEIAKHKASVEDADTQSKVHQLYETIQRWSP IASTLP ELVQRLVTIKQLHEQAMQ  
FGQLLTHLDTTQQMIANSLKDNTLLTQVQTTMRENLATVEGNFASIDERMKKL GK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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: <a href="#">27857681</a> )
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:	<a href="#">NP_006391</a>



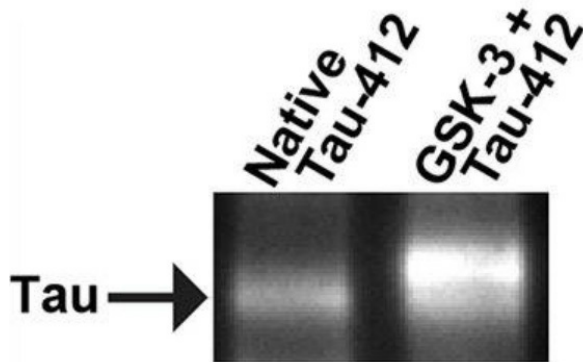
[View online »](#)

**Locus ID:** 10540  
**UniProt ID:** [Q13561](#), [V9HW58](#)  
**RefSeq Size:** 1757  
**Cytogenetics:** 12q13.3  
**RefSeq ORF:** 1218  
**Synonyms:** DCTN50; DYNAMITIN; HEL-S-77; RBP50

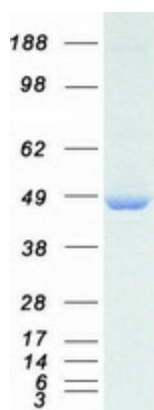
**Summary:** This gene encodes a 50-kD subunit of dynactin, a macromolecular complex consisting of 10-11 subunits ranging in size from 22 to 150 kD. Dynactin binds to both microtubules and cytoplasmic dynein. It is involved in a diverse array of cellular functions, including ER-to-Golgi transport, the 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]).