

## Product datasheet for **TP316559**

### CDC42 (NM\_044472) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human cell division cycle 42 (GTP binding protein, 25kDa) (CDC42), transcript variant 2, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC216559 representing NM_044472 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MQTIKCVVWGDGAVGKTCLLISYTTNKFSEYVPTVFDNYAVTMIGGEPYTLGLFDTAGQEDYDRLRPL  
SYPQTDVFLVCFVSPSSFENVKEKWVPEITHHCPTPFLLVGTQIDLRDDPSTIEKLAKNKQKPITPE  
TAEKLARDLKAVKYVECSALTQRGLKNVFDEAILAALEPPETQPKRKCIF

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-Myc/DDK
Predicted MW:	21.1 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
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_426359</a>
Locus ID:	998
UniProt ID:	<a href="#">P60953</a>



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RefSeq Size: 1135

Cytogenetics: 1p36.12

RefSeq ORF: 573

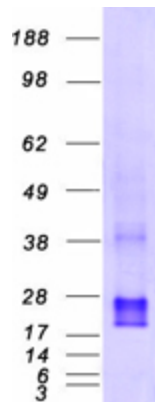
Synonyms: CDC42Hs; G25K; TKS

**Summary:** The protein encoded by this gene is a small GTPase of the Rho-subfamily, which regulates signaling pathways that control diverse cellular functions including cell morphology, migration, endocytosis and cell cycle progression. This protein is highly similar to *Saccharomyces cerevisiae* Cdc 42, and is able to complement the yeast *cdc42-1* mutant. The product of oncogene *Dbl* was reported to specifically catalyze the dissociation of GDP from this protein. This protein could regulate actin polymerization through its direct binding to Neural Wiskott-Aldrich syndrome protein (N-WASP), which subsequently activates Arp2/3 complex. Alternative splicing of this gene results in multiple transcript variants. Pseudogenes of this gene have been identified on chromosomes 3, 4, 5, 7, 8 and 20. [provided by RefSeq, Apr 2013]

**Protein Families:** Druggable Genome

**Protein Pathways:** Adherens junction, Axon guidance, Chemokine signaling pathway, Endocytosis, Epithelial cell signaling in *Helicobacter pylori* infection, Fc gamma R-mediated phagocytosis, Focal adhesion, GnRH signaling pathway, Leukocyte transendothelial migration, MAPK signaling pathway, Neurotrophin signaling pathway, Pancreatic cancer, Pathogenic *Escherichia coli* infection, Pathways in cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway, Tight junction, VEGF signaling pathway

### Product images:



Coomassie blue staining of purified CDC42 protein (Cat# TP316559). The protein was produced from HEK293T cells transfected with CDC42 cDNA clone (Cat# [RC216559]) using MegaTran 2.0 (Cat# [TT210002]).