

## Product datasheet for PH316559

### CDC42 (NM\_044472) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	CDC42 MS Standard C13 and N15-labeled recombinant protein (NP_426359)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC216559
Predicted MW:	21.1 kDa
Protein Sequence:	>RC216559 representing NM_044472 Red=Cloning site Green=Tags(s)  MQTIKCVVVDGAVGKTCLLISYTTNKFSEYVPTVFDNYAVTVMIGGEPYTLGLFDTAGQEDYDRLRPL SYPQTDVFLVCFVSVSPSSFENVKEKWVPEITHHCPKTPFLLVGTQIDLRRDPSTIEKLAKNKQKPITPE TAEKLARDLKAVKYVECSALTQRGLKNVFDEAILAALEPPETQPKRKCCIF  TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_426359</a>
RefSeq Size:	1135
RefSeq ORF:	573
Synonyms:	CDC42Hs; G25K; TKS
Locus ID:	998
UniProt ID:	<a href="#">P60953</a> , <a href="#">A0A024RAE6</a>



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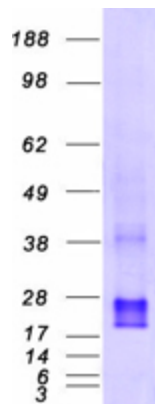
**Cytogenetics:** 1p36.12

**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]).