

Full-Length

# CDC42 (Human) Recombinant Protein

Catalog # P9359 Size 50 ug

Specification	
Product Description	Human CDC42 full-length recombinant protein with T7 tag in N-terminus expressed in <i>Escherichia c oli</i> .
Sequence	MASMTGGQQMGRGSHMQTIKCVVVGDGAVGKTCLLISYTTNKFPSEYVPTVFDNYAVTVMIGGEP YTLGLFDTAGQEDYDRLRPLSYPQTDVFLVCFSVVSPSSFENVKEKWVPEITHHCPKTPFLLVGT QIDLRDDPSTIEKLAKNKQKPITPETAEKLARDLKAVKYVECSALTQKGLKNVFDEAILAALEPPEP KKSRRC
Host	Escherichia coli
Theoretical MW (kDa)	22.4
Form	Liquid
Preparation Method	Escherichia coli expression system
Purification	chromatographic
Purity	> 95% as determined by SDS-PAGE.
Storage Buffer	Solution containing 20 mM Tris-HCl, pH 8.0, 10% glycerol, 2 mM EDTA, 1 mM DTT.
Storage Instruction	Store at 4°C for one weeks and should be stored at -20°C to -80°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).  Avoid repeated freeze/thaw cycles.

## Applications

SDS-PAGE

## Gene Info — CDC42



#### **Product Information**

Entrez GenelD	<u>998</u>
Protein Accession#	P60953
Gene Name	CDC42
Gene Alias	CDC42Hs, G25K
Gene Description	cell division cycle 42 (GTP binding protein, 25kDa)
Omim ID	<u>116952</u>
Gene Ontology	<u>Hyperlink</u>
Gene 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. [provided by RefSeq
Other Designations	GTP-binding protein, 25kD OTTHUMP00000002834 OTTHUMP00000002926 cell division cycle 42 cell division cycle 42 (GTP binding protein, 25kD) cell division cycle 42 (GTP-binding protein, 25kD) dJ224A6.1.1 (cell division cycle 42 (GTP-binding protein, 25kD)) d

### Pathway

- 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 EHEC
- Pathways in cancer
- Regulation of actin cytoskeleton
- Renal cell carcinoma
- T cell receptor signaling pathway
- Tight junction
- VEGF signaling pathway

#### Disease

- Genetic Predisposition to Disease
- Hepatitis B
- HIV Infections
- Multiple Sclerosis
- Parkinson disease