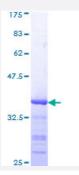


# CDC42 (Human) Recombinant Protein (Q01)

Catalog # H00000998-Q01 Size 25 ug, 10 ug

### **Applications**



Specification	
Product Description	Human CDC42 partial ORF ( NP_001782, 94 a.a 188 a.a.) recombinant protein with GST-tag at N -terminal.
Sequence	KEKWVPEITHHCPKTPFLLVGTQIDLRDDPSTIEKLAKNKQKPITPETAEKLARDLKAVKYVECSAL TQKGLKNVFDEAILAALEPPEPKKSRRC
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.19
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

### **Applications**



- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CDC42	
Entrez GenelD	998
GeneBank Accession#	NM_001791
Protein Accession#	NP_001782
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 OTTHUMP0000002834 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