

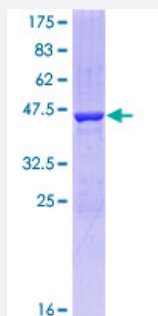
Full-Length

CDC42 (Human) Recombinant Protein (P01)

Catalog # H00000998-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human CDC42 full-length ORF (AAH02711, 1 a.a. - 191 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MQTIKCVVVG DGAVGKTCLLSYTTNKFSEYVPTVFDNYAVTVMIGGEPYTLGLFDTAGQEDYDR LRPLSYPTDVLVCF SVSPSSFENVKEKWVPEITHHCPKTPFLLVGTQIDLRDDPSTIEKLAKN KQKPITPETA EKLARDLKAVKYVECSALTQKGLKNVFDEAILAALEPPEPKSRRCVLL
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	46.75
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 GeneID [998](#)

GeneBank Accession# [BC002711](#)

Protein Accession# [AAH02711](#)

Gene Name CDC42

Gene Alias CDC42Hs, G25K

Gene Description cell division cycle 42 (GTP binding protein, 25kDa)

Omim ID [116952](#)

Gene Ontology [Hyperlink](#)

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

Publication Reference

- [Hepatitis B virus utilizes a retrograde trafficking route via the trans-Golgi network to avoid lysosomal degradation.](#)

Ying-Yi Li, Kazuyuki Kuroki, Tetsuro Shimakami, Kazuhisa Murai, Kazunori Kawaguchi, Takayoshi Shirasaki, Kouki Nio, Saiho Sugimoto, Tomoki Nishikawa, Hikari Okada, Noriaki Orita, Hideo Takayama, Ying Wang, Phuong Doan Thi Bich, Astuya Ishida, Sadahiro Iwabuchi, Shinichi Hashimoto, Takeshi Shimaoka, Noriko Tabata, Miho Watanabe-Takahashi, Kiyotaka Nishikawa, Hiroshi Yanagawa, Motoharu Seiki, Kouji Matsushima, Taro Yamashita, Shuichi Kaneko, Masao Honda.

Cellular and Molecular Gastroenterology and Hepatology 2022 Oct; S2352-345X(22):219.

Application: Func, Recombinant proteins

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](#)