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CDC42 Human

Cell Division Cycle 42 Human Recombinant
RCP0364

Product Overview

Name	CDC42 Human
Description	
Cell Division Cycle 42 Human Recombinant	
Accession (Primary)	P60953
Synonyms	
Cell division control protein 42 homolog, G25K GTP-binding protein, CDC42, G25K, CDC42Hs.	
Introduction	
CDC42 (Cell division cycle 42 isoform 1) is a small GTPase of the Rho-subfamily that regulates signaling pathways which control various cellular functions including cell morphology, migration, endocytosis and cell cycle progression. CDC42 is a plasma membrane-associated small GTPase which cycles between an active GTP-bound and an inactive GDP-bound state. In the active state, CDC42 binds to a variety of effector proteins to regulate cellular responses. CDC42 is involved in epithelial cell polarization processes. CDC42 causes the formation of thin, actin-rich surface projections called filopodia. Also, CDC42 regulates actin polymerization through its direct binding to N-WASP (Neural Wiskott-Aldrich syndrome protein), which subsequently activates Arp2/3 complex. Loss of CDC42 function raises endocytotic uptake of apical proteins, as well as apical polarity factors such as Crumbs. The product of oncogene Dbl was described to specifically catalyze the dissociation of GDP from CDC42 protein.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered colorless solution.	
Formulation	
The CDC42 solution contains 20mM Tris-HCl buffer (pH8.0), 1mM DTT, 10% glycerol and 2mM EDTA.	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.	
Purity	
Greater than 95.0% as determined by SDS-PAGE.	
Amino acid sequence	

MASMTGGQQM GRGSH MQTIK CVVVGDGAVG KTCLLISYTT NKFPSEYVPT VFDNYAVTVM IGGEPYTLGL FDTAGQEDYD RLRPLSYPQT DVFLVCFSVV SPSSFENVKE KWVPEITHHC PKTPFLLVGT QIDLRDDPST IEKLAKNKQK PITPETAEKL ARDLKAVKYV ECSALTQKGL KNVFDEAILA ALEPPEPKKS RRC.

Precautions

CDC42 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P60953)