Recombinant Full Length Human cell division cycle 42 Protein, Tag Free

Cat. No. CDC42-162H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human CDC42 protein (P60953-2) (Met 1-Leu 191) without tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	1-191aa
Description	Plasma membrane-associated small GTPase which cycles between an active GTP-bound and an inactive GDP-bound state. In active state binds to a variety of effector proteins to regulate cellular responses. Involved in epithelial cell polarization processes. Regulates the bipolar attachment of spindle microtubules to kinetochores before chromosome congression in metaphase. In neurons, plays a role in the extension and maintenance of the formation of filopodia, thin and actin-rich surface projections. Required for DOCK10-mediated spine formation in Purkinje cells and hippocampal neurons. In podocytes, facilitates filopodia and podosomes formation upon DOCK11-activation. Upon activation by CaMKII, modulates dendritic spine structural plasticity by relaying CaMKII transient activation to synapse-specific, long-term signaling. Also plays a role in phagocytosis through organization of the F-actin cytoskeleton associated with forming phagocytic cups.
Tag	Non

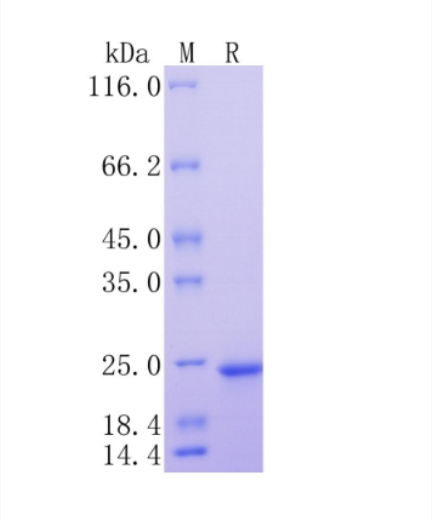
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Molecular Mass	21.6 kDa
Endotoxin	Less than 1.0 EU/μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution	Reconstitute at 250 μg/mL in sterile water.

GENE INFORMATION

Gene Name	CDC42 cell division cycle 42 [Homo sapiens (human)]
Official Symbol	CDC42
Synonyms	CDC42; cell division cycle 42 (GTP binding protein, 25kDa); cell division cycle 42 (GTP binding protein, 25kD); cell division control protein 42 homolog; CDC42Hs; G25K; G25K GTP-binding protein; GTP-binding protein, 25kD; growth-regulating protein; small GTP binding protein CDC42; dJ224A6.1.1 (cell division cycle 42 (GTP-binding protein, 25kD)); dJ224A6.1.2 (cell division cycle 42 (GTP-binding protein, 25kD));
Gene ID	998
mRNA Refseq	NM_001039802

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Protein Refseq	NP_001034891
MIM	116952
UniProt ID	P60953
Protein on SDS-PAGE under reducing (R) condition.	

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