

Recombinant Human CDC42 protein(His tag)

Catalog No. PDEH100088

Note: Centrifuge before opening to ensure complete recovery of vial contents.

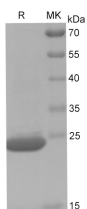
Description

Synonyms	G25K GTP-binding protein
Species	Human
Expression Host	E.coli
Sequence	Met1-Cys188
Accession	P60953-2
Calculated Molecular Weight	20.9 kDa
Observed molecular weight	24 kDa
Tag	N-His & C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Plasma membrane-associated small GTPase which cycles between an active GTP-bound and an inactive GDP-bound

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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. Regulates cell migration. 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.