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Datasheet for ABIN7505004
CDC42 Protein (AA 1-188) (His tag)

Overview

Quantity:	100 µg
Target:	CDC42
Protein Characteristics:	AA 1-188
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CDC42 protein is labelled with His tag.

Product Details

Sequence:	Met1-Cys188
Characteristics:	A DNA sequence encoding the Human CDC42 protein (P60953-2) (Met1-Cys188) was expressed with a N-His.
Purity:	> 95 % as determined by reducing SDS-PAGE.

Target Details

Target:	CDC42
Alternative Name:	CDC42 (CDC42 Products)
Background:	Abbreviation: CDC42 Target Synonym: G25K GTP-binding protein Background: 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

Target Details

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.

Molecular Weight: Calculated MW: 20.9 kDa
Observed MW: 24 kDa

UniProt: [P60953-2](#)

Pathways: [MAPK Signaling](#), [Microtubule Dynamics](#), [RTK Signaling](#), [WNT Signaling](#), [TCR Signaling](#), [EGFR Signaling Pathway](#), [Regulation of Actin Filament Polymerization](#), [Regulation of Muscle Cell Differentiation](#), [Cell-Cell Junction Organization](#), [Maintenance of Protein Location](#), [Skeletal Muscle Fiber Development](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [EGFR Downregulation](#), [VEGF Signaling](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Buffer: Lyophilized from sterile PBS, pH 7.4.
Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: 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.

Expiry Date: 12 months