

**Cdc42 ΔC^{GST}**

Cell Division Cycle Protein 42, C-terminal deletion of 13 residues
human, recombinant, *E. coli*

Cat. No.	Amount
PR-302	50 µg

For general laboratory use.

Shipping: shipped on dry ice

Storage Conditions: store at -80 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Molecular Weight: 19.8 kDa (178 amino acids)

Accession number: AF498962

Purity: > 90 % (SDS-PAGE)

Form: liquid (Supplied in 30 mM Tris-HCl pH 7.0 and 5 mM DTE)

Description:

Rho family GTPases Rac1 and Cdc42 (cell division cycle 42) belong to the Ras superfamily of small GTP-binding proteins. The human homolog of yeast Cdc42 is essential for cell polarity and regulates cytoskeletal rearrangements in responses to growth factor stimulation. The C-terminal deletion of 13 amino acids of Cdc42 ΔC includes the polybasic domain consisting of six contiguous basic amino acids. The polybasic domain of Cdc42 is required for homodimer formation. The GST-Tag facilitates the protein's application in typical GST pull-down assays. Protein preparation is 100% GDP-loaded, measured by HPLC.

Selected References:

Wedlich-Soldner *et al.* (2003) Spontaneous cell polarization through Actomyosin-based delivery of the Cdc42 GTPase. *Science* **299**:1231.

Zhang *et al.* (2001) Oligomerization of Rac1 GTPase mediated by carboxy-terminal polybasic domain. *J. Biol. Chem.* **276**:8958.

Zhang *et al.* (1999) A built-in arginine finger triggers the selfstimulatory GTPase-activating activity of Rho family GTPases. *J. Biol. Chem.* **274**:2609.

Zhang *et al.* (1998) Negative regulation of Rho family GTPases Cdc42 and Rac2 by homodimer formation. *J. Biol. Chem.* **273**:25728.

Chamberlain *et al.* (2004) The p85alpha Subunit of Phosphatidylinositol 3-kinase Binds to and Stimulates the GTPase Activity of Rab Proteins. *J. Biol. Chem.* **279** (47):48607.