

## CDC42 PROTEIN

产品名称: Cdc42 蛋白

货号 10107

产品全名: Cdc42 蛋白

基因符号 Cell division cycle 42, G25K, CDC42Hs

**Source:** Human, recombinant full length, His6-tag

**Expression 种属反应性:** E. coli

分子量: 21 kDa

纯化: >95% by SDS-PAGE

**Introduction:** Small GTPases are a super-family of cellular signaling regulators. Cdc42 belongs to the Rho sub-family of GTPases that regulate cell motility, cell division, and gene transcription. GTP binding increases the activity of Cdc42, and the hydrolysis of GTP to GDP renders it inactive. GTP hydrolysis is aided by GTPase activating proteins (GAPs), while exchange of GDP for GTP is facilitated by guanine nucleotide exchange factors (GEFs).

**Amino Acid Sequence (1-191)**

**MQTIKCVVVG DGAVGKTCLLISYTTNKF PSEYVPTVFDNYAVTVMIGGEPYTLGLFDTAGQEDYDRL  
RPLSYPQTDVFLVCF SVVSPSSFENVKEK WVP EITHHCPKTPFLLVGTQIDLRDDPSTIEKLAKNKQ  
KPITPETA EKLARDLKAVKYVECSALTQKGLKNVFDEAILAALEPPEPKKSRRCVLL**

### Properties

**Physical Appearance (form):** Dissolved in 20mM Tris-HCl, pH8.0, 150mM NaCl.

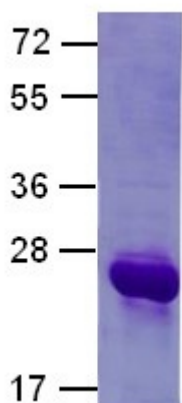
**Physical Appearance (form):** White or clear

**Concentration:** 1 mg/mL

**Storage:** -80°C

### Preparation Instructions:

Centrifuge the vial before open the cap and reconstitute in water. Adding of 10 mM  $\beta$ -mercaptoethanol or 1 mM DTT into the solution to protect the protein is recommended and using of non-ionic detergents such as n-Dodecyl  $\beta$ -D-maltoside (DoDM) or polyethylene detergents (e.g. C12E10) also help to stabilize the protein. Avoid repeated freezing and thawing after reconstitution. The purity of His-tagged Cdc42 was determined by SDS- PAGE and Coomassie Brilliant Blue Staining.



### References:

1. Garrett, W. S. . et al., *Cell* 102: 325-334, 2000.
2. Irie, F. et al., *Nature Neurosci.* 5: 1117-1118, 2002.
3. Kawasaki, Y. et al., *Oncogene* 26: 7620-7627, 2007.
4. Manser, E. et al., *Nature* 363: 364-367, 1993.
5. Musch, A. et al., *EMBO J.* 20: 2171-2179, 2001.
6. Nalbant, P. et al., *Science* 305: 1615-1619, 2004.
7. Shen, Y. et al., *Dev. Cell* 14: 342-353, 2008.
8. Wu, W. J. et al., *Nature* 405: 800-804, 2000.
9. Wu, X. et al., *Genes Dev.* 20: 571-585, 2006.
10. Zheng, Y. et al., *J. Biol. Chem.* 271: 33169-33172, 1996.