

# **California Bioscience**

# **Product Datasheet**

Product Name	Cell Division Cycle 37 Human Recombinant
Cata No	CB501081
Source	Escherichia Coli.
Synonyms	P50CDC37, CDC-37, CDC37, Hsp90 co-chaperone Cdc37, Hsp90 chaperone protein kinase-targeting subunit, CDC37A, Cell Division Cycle 37.

#### Description

CDC37 is an essential protein in Saccharomyces cerevisiae and is a molecular chaperone with precise function in cell signal transduction. CDC37 forms a complex/associates with Hsp90 molecular chaperone as one of several auxiliary proteins that are collectively referred to as Hsp90 co-chaperones. CDC37 also forms complex with a number of protein kinases such as CDK4, CDK6, SRC, RAF-1, MOK, as well as eIF2 alpha kinases. CDC34 is involved in directing Hsp90 to its target kinases. CDC37 up-regulation is a common early event in some localized human cancers. CDC37 is necessary for maintaining prostate tumor cell growth and represents a novel target in the exploration for multitargeted therapies. CDC37 plays a role in regulating Hsp90 ATPase activity. CDC37 binds to Akt and HSP90 in the signal transduction pathway in human tumor cells. Tnf-induced recruitment and activation of the IKK complex require Cdc37 and Hsp90. CDC37 and heat shock protein 90 bind specifically to the kinase domain of LKB1. CDC37 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 378 amino acids and having a molecular mass of 44.4 kDa.

#### **Physical Appearance**

Sterile Filtered colorless solution.

## Purity

Greater than 95.0% as determined by SDS-PAGE.

#### Formulation

The CDC37 protein solution contains 20mM Tris-HCl pH-8 & 10% glycerol.

#### Stability

CDC37 although stable  $4^{\circ}$  for 4 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

## Sequence

MVDYSVWDHI EVSDDEDETH PNIDTASLFR WRHQARVERM EQFQKEKEEL DRGCRECKRK VAECQRKLKE LEVAEGGKAE LERLQAEAQQ LRKEERSWEQ KLEEMRKKEK SMPWNVDTLS KDGFSKSMVN TKPEKTEEDS EEVREQKHKT FVEKYEKQIK HFGMLRRWDD SQKYLSDNVH LVCEETANYL VIWCIDLEVE EKCALMEQVA HQTIVMQFIL ELAKSLKVDP RACFRQFFTK IKTADRQYME GFNDELEAFK ERVRGRAKLR IEKAMKEYEE EERKKRLGPG GLDPVEVYES LPEELQKCFD VKDVQMLQDA ISKMDPTDAK YHMQRCIDSG LWVPNSKASE AKEGEEAGPG DPLLEAVPKT GDEKDVSV.