

# CIN85 (G-12): sc-271310

## BACKGROUND

CD2AP (CMS) and CIN85 (Ruk) belong to a family of ubiquitously expressed adaptor molecules containing three SH3 domains, a proline-rich region and a coiled-coil domain. By binding to numerous proteins, CD2AP and CIN85 assemble multimeric complexes implicated in cell-specific signals controlling T cell activation, kidney glomeruli function or apoptosis in neuronal cells. CIN85/CD2AP also associate with accessory endocytic proteins, components of the actin cytoskeleton and other adaptor proteins involved in receptor tyrosine kinase signaling. These interactions enable CIN85/CD2AP to function within a network of signaling pathways that coordinate critical steps involved in downregulation and degradation of receptor tyrosine kinases.

## REFERENCES

1. Take, H., et al. 2000. Cloning and characterization of a novel adaptor protein, CIN85, that interacts with c-Cbl. *Biochem. Biophys. Res. Commun.* 268: 321-328.
2. Watanabe, S., et al. 2000. Characterization of the CIN85 adaptor protein and identification of components involved in CIN85 complexes. *Biochem. Biophys. Res. Commun.* 278: 167-174.
3. Szymkiewicz, I., et al. 2002. CIN85 participates in Cbl- $\beta$ -mediated down-regulation of receptor tyrosine kinases. *J. Biol. Chem.* 277: 39666-39672.
4. Haglund, K., et al. 2002. Cbl-directed monoubiquitination of CIN85 is involved in regulation of ligand-induced degradation of EGF receptors. *Proc. Natl. Acad. Sci. USA* 99: 12191-12196.
5. Dikic, I. 2002. CIN85/CMS family of adaptor molecules. *FEBS Lett.* 529: 110-115.
6. Schmidt, M.H., et al. 2003. SETA/CIN85/Ruk and its binding partner AIP1 associate with diverse cytoskeletal elements, including FAKs, and modulate cell adhesion. *J. Cell Sci.* 116: 2845-2855.
7. Kowanetz, K., et al. 2004. CIN85 associates with multiple effectors controlling intracellular trafficking of epidermal growth factor receptors. *Mol. Biol. Cell* 15: 3155-3166.
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## CHROMOSOMAL LOCATION

Genetic locus: SH3KBP1 (human) mapping to Xp22.12; Sh3kbp1 (mouse) mapping to X F4.

## SOURCE

CIN85 (G-12) is a mouse monoclonal antibody raised against amino acids 366-665 mapping at the C-terminus of CIN85 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

CIN85 (G-12) is recommended for detection of CIN85 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CIN85 siRNA (h): sc-43684, CIN85 siRNA (m): sc-45333, CIN85 shRNA Plasmid (h): sc-43684-SH, CIN85 shRNA Plasmid (m): sc-45333-SH, CIN85 shRNA (h) Lentiviral Particles: sc-43684-V and CIN85 shRNA (m) Lentiviral Particles: sc-45333-V.

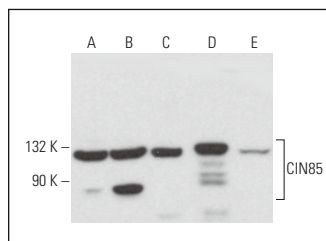
Molecular Weight of CIN85: 85 kDa.

Positive Controls: A549 cell lysate: sc-2413, NIH/3T3 whole cell lysate: sc-2210 or C2C12 whole cell lysate: sc-364188.

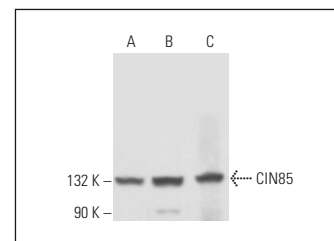
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



CIN85 (G-12): sc-271310. Western blot analysis of CIN85 expression in A549 (A), NTERA-2 cl.D1 (B), C2C12 (C), MTE1D (D) and F9 (E) whole cell lysates.



CIN85 (G-12): sc-271310. Western blot analysis of CIN85 expression in NIH/3T3 (A) and A549 (B) whole cell lysates and rat heart tissue extract (C).

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.