

CIN85 (E-1): sc-377342

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- β -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.

CHROMOSOMAL LOCATION

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

SOURCE

CIN85 (E-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 495-531 within an internal region of CIN85 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-377342 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

CIN85 (E-1) 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 μ g per 100-500 μ 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.

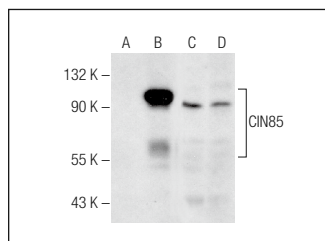
Molecular Weight of CIN85: 85 kDa.

Positive Controls: CIN85 (h2): 293T Lysate: sc-175351, Jurkat whole cell lysate: sc-2204 or THP-1 cell lysate: sc-2238.

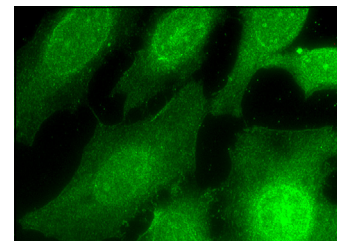
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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 κ BP-FITC: sc-516140 or m-IgG κ 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 (E-1): sc-377342. Western blot analysis of CIN85 expression in non-transfected 293T: sc-117752 (A), human CIN85 transfected 293T: sc-175351 (B), THP-1 (C) and Jurkat (D) whole cell lysates.



CIN85 (E-1): sc-377342. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

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 for detailed protocols and support products.