

CIN85 (A-7): sc-166862

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.

CHROMOSOMAL LOCATION

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

SOURCE

CIN85 (A-7) 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 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CIN85 (A-7) is available conjugated to agarose (sc-166862 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166862 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166862 PE), fluorescein (sc-166862 FITC), Alexa Fluor[®] 488 (sc-166862 AF488), Alexa Fluor[®] 546 (sc-166862 AF546), Alexa Fluor[®] 594 (sc-166862 AF594) or Alexa Fluor[®] 647 (sc-166862 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166862 AF680) or Alexa Fluor[®] 790 (sc-166862 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CIN85 (A-7) 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 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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: THP-1 cell lysate: sc-2238 or Jurkat whole cell lysate: sc-2204.

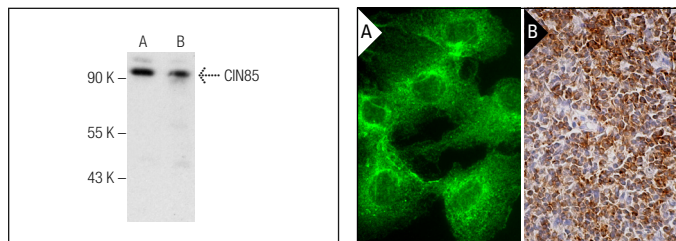
RESEARCH USE

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

STORAGE

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

DATA



CIN85 (A-7): sc-166862. Western blot analysis of CIN85 expression in THP-1 (A) and Jurkat (B) whole cell lysates.

CIN85 (A-7): sc-166862. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic and membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing cytoplasmic staining of cells in germinal and non-germinal centers (B).

SELECT PRODUCT CITATIONS

- Cascio, S. and Finn, O.J. 2015. Complex of MUC1, CIN85 and Cbl in colon cancer progression and metastasis. *Cancers* 7: 342-352.
- Mutso, M., et al. 2018. Mutation of CD2AP and SH3KBP1 binding motif in alphavirus nsP3 hypervariable domain results in attenuated virus. *Viruses* 10: 226.
- Agback, P., et al. 2019. Structural characterization and biological function of bivalent binding of CD2AP to intrinsically disordered domain of chikungunya virus nsP3 protein. *Virology* 537: 130-142.
- Meshram, C.D., et al. 2020. Mutations in hypervariable domain of venezuelan equine encephalitis virus nsP3 protein differentially affect viral replication. *J. Virol.* 94: e01841-19.
- Li, X., et al. 2020. LncRNA ARAP1-AS2 promotes high glucose-induced human proximal tubular cell injury via persistent transactivation of the EGFR by interacting with ARAP1. *J. Cell. Mol. Med.* 24: 12994-13009.
- Lukash, T., et al. 2020. Structural and functional characterization of host FHL1 protein interaction with hypervariable domain of Chikungunya virus nsP3 protein. *J. Virol.* 95: e01672-20.
- Panagiotou, T.C., et al. 2022. An anillin-CIN85-SEPT9 complex promotes intercellular bridge maturation required for successful cytokinesis. *Cell Rep.* 40: 111274.
- Iwano, T., et al. 2023. The Rab GTPase-binding protein EHP1L1 and its interactors CD2AP/CIN85 negatively regulate the length of primary cilia via Actin remodeling. *J. Biol. Chem.* 299: 102985.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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