

MVB12A (G-14): sc-242430

BACKGROUND

CFBP (CIN85/CD2AP family-binding protein), also known as FAM125A (family with sequence similarity 125 member A), is a 273 amino acid protein that localizes to both the cytoplasm and the nucleus and exists as multiple alternatively spliced isoforms. Expressed in nearly all tissues, with the exception of skeletal muscle, CFBP interacts with CD2AP and CIN85 and is thought to be involved in the ligand-mediated internalization and down-regulation of EGFR. Human CFBP is subject to phosphorylation on Tyr 204, an event that is necessary for proper interaction with CD2AP and CIN85. The gene encoding CFBP maps to human chromosome 19, which is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs). The rodent homologs have been provisionally designated Fam125a in mouse and rat pending further characterization.

REFERENCES

1. Dikic, I. 2002. CIN85/CMS family of adaptor molecules. *FEBS Lett.* 529: 110-115.
2. Lynch, D.K., et al. 2003. A Cortactin-CD2-associated protein (CD2AP) complex provides a novel link between epidermal growth factor receptor endo- cytosis and the actin cytoskeleton. *J. Biol. Chem.* 278: 21805-21813.
3. Kowanetz, K., et al. 2003. Identification of a novel proline-arginine motif involved in CIN85-dependent clustering of Cbl and down-regulation of epidermal growth factor receptors. *J. Biol. Chem.* 278: 39735-39746.
4. Grimwood, J., et al. 2004. The DNA sequence and biology of human chromosome 19. *Nature* 428: 529-535.
5. Konishi, H., et al. 2006. CFBP is a novel tyrosine-phosphorylated protein that might function as a regulator of CIN85/CD2AP. *J. Biol. Chem.* 281: 28919-28931.
6. Konishi, H. 2007. Proteomic identification of the new functional proteins in the EGF receptor-mediated signaling pathway. *Seikagaku* 79: 781-785.
7. Dephoure, N., et al. 2008. A quantitative atlas of mitotic phosphorylation. *Proc. Natl. Acad. Sci. USA* 105: 10762-10767.

CHROMOSOMAL LOCATION

Genetic locus: MVB12A (human) mapping to 19p13.11; Fam125a (mouse) mapping to 8 B3.3.

SOURCE

MVB12A (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MVB12A of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-242430 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MVB12A (G-14) is recommended for detection of MVB12A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

MVB12A (G-14) is also recommended for detection of MVB12A in additional species, including equine, canine and bovine.

Suitable for use as control antibody for MVB12A siRNA (h): sc-97374, MVB12A siRNA (m): sc-108153, MVB12A shRNA Plasmid (h): sc-97374-SH, MVB12A shRNA Plasmid (m): sc-108153-SH, MVB12A shRNA (h) Lentiviral Particles: sc-97374-V and MVB12A shRNA (m) Lentiviral Particles: sc-108153-V.

Molecular Weight of MVB12A: 29 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.