

# FBLIM1 (G-7): sc-271417

## BACKGROUND

FBLIM1 (filamin binding LIM protein 1), also known as CAL (CSX-associated LIM), Mig-2-interacting protein or Migfilin, is a cytoplasmic protein that belongs to the LIM superfamily. Three isoforms exist for FBLIM1 due to alternative splicing events, namely FBLP-1A, FBLP-1 and FBLP-1B. All three isoforms are expressed in pancreas, kidney, placenta, lung, platelets and heart, while FBLP-1 is also expressed in brain and skeletal muscle. Depending on the isoform, FBLIM1 contains a proline-rich domain and two or three C-terminal LIM zinc-binding domains. FBLIM1 specifically localizes to cell-matrix adhesion sites and, via its C-terminus, interacts with Mig-2 functioning as an important scaffold protein. Via its N-terminus, FBLIM1 interacts with Filamin 3 and provides an anchoring site for actin filaments, linking cell-matrix adhesions with the Actin cytoskeleton. In addition, FBLIM1 is capable of translocating to the nucleus and regulating gene expression.

## REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607747. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Tu, Y., et al. 2003. Migfilin and Mig-2 link focal adhesions to filamin and the actin cytoskeleton and function in cell shape modulation. *Cell* 113: 37-47.
3. Takafuta, T., et al. 2003. A new member of the LIM protein family binds to filamin B and localizes at stress fibers. *J. Biol. Chem.* 278: 12175-12181.
4. Wu, C. 2005. Migfilin and its binding partners: from cell biology to human diseases. *J. Cell Sci.* 118: 659-664.

## CHROMOSOMAL LOCATION

Genetic locus: FBLIM1 (human) mapping to 1p36.21; Fblim1 (mouse) mapping to 4 E1.

## SOURCE

FBLIM1 (G-7) is a mouse monoclonal antibody raised against amino acids 301-373 mapping at the C-terminus of FBLIM1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FBLIM1 (G-7) is available conjugated to agarose (sc-271417 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271417 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271417 PE), fluorescein (sc-271417 FITC), Alexa Fluor® 488 (sc-271417 AF488), Alexa Fluor® 546 (sc-271417 AF546), Alexa Fluor® 594 (sc-271417 AF594) or Alexa Fluor® 647 (sc-271417 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271417 AF680) or Alexa Fluor® 790 (sc-271417 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## RESEARCH USE

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

## APPLICATIONS

FBLIM1 (G-7) is recommended for detection of FBLIM1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FBLIM1 siRNA (h): sc-88837, FBLIM1 siRNA (m): sc-145095, FBLIM1 shRNA Plasmid (h): sc-88837-SH, FBLIM1 shRNA Plasmid (m): sc-145095-SH, FBLIM1 shRNA (h) Lentiviral Particles: sc-88837-V and FBLIM1 shRNA (m) Lentiviral Particles: sc-145095-V.

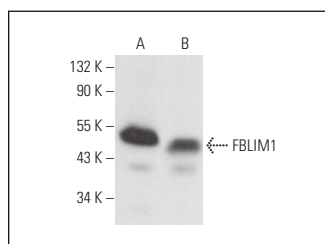
Molecular Weight of FBLIM1: 50 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, C2C12 whole cell lysate: sc-364188 or WI-38 whole cell lysate: sc-364260.

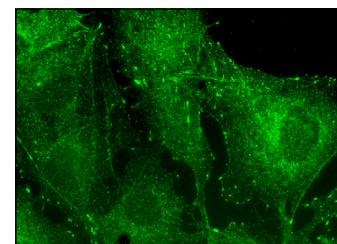
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



FBLIM1 (G-7): sc-271417. Western blot analysis of FBLIM1 expression in WI-38 (A) and C2C12 (B) whole cell lysates.



FBLIM1 (G-7): sc-271417. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoskeletal localization.

## SELECT PRODUCT CITATIONS

1. Indra, I., et al. 2013. The adherens junction: a mosaic of cadherin and nectin clusters bundled by Actin filaments. *J. Invest. Dermatol.* 133: 2546-2554.

## STORAGE

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