

FAIM2 (H-7): sc-398737

BACKGROUND

FAIM2 (Fas apoptotic inhibitory molecule 2), also known as LFG (protein lifeguard), TMBIM2 (transmembrane BAX inhibitor motif-containing protein 2) and NMP35 (neural membrane protein 35), is a 316 amino acid multipass membrane protein that uniquely protects cells from Fas-induced apoptosis. Though widely expressed, FAIM2 expression is highest in hippocampus. FAIM2 contains seven transmembrane domains and resembles Bax Inhibitor-1, another anti-apoptotic protein. Overexpression of FAIM2 results in decreased caspase activation and reduced incidence of programmed cell death. Though mechanistically related to the Fas signal, FAIM2 does not protect cells from apoptosis that is mediated by TNF- α signaling. FAIM2 specifically regulates apoptosis by binding to the FAS receptor.

REFERENCES

- Schweitzer, B., et al. 1998. Neural membrane protein 35 (NMP35): a novel member of a gene family which is highly expressed in the adult nervous system. *Mol. Cell. Neurosci.* 11: 260-273.
- Somia, N.V., et al. 1999. LFG: an anti-apoptotic gene that provides protection from Fas-mediated cell death. *Proc. Natl. Acad. Sci. USA* 96: 12667-12672.
- Schweitzer, B., et al. 2002. Neural membrane protein 35/lifeguard is localized at postsynaptic sites and in dendrites. *Brain Res. Mol. Brain Res.* 107: 47-56.
- Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 604306. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Choi, C.Y., et al. 2007. Inhibition of apoptosis by expression of antiapoptotic proteins in recombinant human keratinocytes. *Cell Transplant.* 16: 663-674.

CHROMOSOMAL LOCATION

Genetic locus: FAIM2 (human) mapping to 12q13.12; Faim2 (mouse) mapping to 15 F1.

SOURCE

FAIM2 (H-7) is a mouse monoclonal antibody raised against amino acids 1-72 mapping at the N-terminus of FAIM2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAIM2 (H-7) is available conjugated to agarose (sc-398737 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398737 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398737 PE), fluorescein (sc-398737 FITC), Alexa Fluor® 488 (sc-398737 AF488), Alexa Fluor® 546 (sc-398737 AF546), Alexa Fluor® 594 (sc-398737 AF594) or Alexa Fluor® 647 (sc-398737 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398737 AF680) or Alexa Fluor® 790 (sc-398737 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FAIM2 (H-7) is recommended for detection of FAIM2 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 FAIM2 siRNA (h): sc-95999, FAIM2 siRNA (m): sc-145009, FAIM2 shRNA Plasmid (h): sc-95999-SH, FAIM2 shRNA Plasmid (m): sc-145009-SH, FAIM2 shRNA (h) Lentiviral Particles: sc-95999-V and FAIM2 shRNA (m) Lentiviral Particles: sc-145009-V.

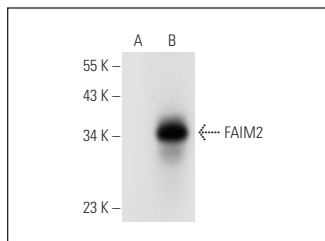
Molecular Weight of FAIM2: 35 kDa.

Positive Controls: FAIM2 (h): 293T Lysate: sc-371178 or FAIM2 (m): 293T Lysate: sc-120159.

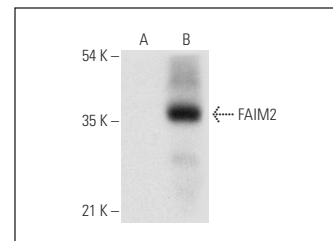
RECOMMENDED SUPPORT REAGENTS

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



FAIM2 (H-7): sc-398737. Western blot analysis of FAIM2 expression in non-transfected: sc-117752 (A) and human FAIM2 transfected: sc-371178 (B) 293T whole cell lysates.



FAIM2 (H-7): sc-398737. Western blot analysis of FAIM2 expression in non-transfected: sc-117752 (A) and mouse FAIM2 transfected: sc-120159 (B) 293T whole cell lysates.

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.