

ABLIM3 (C-2): sc-398575

BACKGROUND

The *C. elegans* protein UNC-115 mediates axon guidance by modulating the growth cone Actin cytoskeleton in response to signals received by growth cone receptors. The mammalian homolog of UNC-115 is the Actin-binding LIM protein family member 1 (ABLIM1, also designated Limatin). The ABLIM1 protein has an N-terminal domain that contains four double zinc finger motifs, which conform to the LIM motif consensus sequence. ABLIM1 binds to F-Actin through a dematin-like domain and is expressed in retina, brain and muscle tissue. There are four known isoforms of ABLIM1. The gene encoding ABLIM1 maps to a region of chromosome 10 associated with frequent loss of heterozygosity in human tumors, thus identifying ABLIM1 as a candidate tumor suppressor gene. ABLIM2 and ABLIM3 show highest expression in muscle and neuronal tissues, bind to F-Actin, and are localized on stress fibers. They also have been shown to enhance STARS (striated muscle activator of Rho signaling) dependent activation of serum-response factor (SRF), thereby modulating transcription.

REFERENCES

- Kim, A.C., et al. 1997. Limatin (LIMAB1), an Actin-binding LIM protein, maps to mouse chromosome 19 and human chromosome 10q25, a region frequently deleted in human cancers. *Genomics* 46: 291-293.
- Roof, D.J., et al. 1997. Molecular characterization of ABLIM, a novel Actin-binding and double zinc finger protein. *J. Cell Biol.* 138: 575-588.
- Lundquist, E.A., et al. 1998. UNC-115, a conserved protein with predicted LIM and Actin-binding domains, mediates axon guidance in *C. elegans*. *Neuron* 21: 385-392.

CHROMOSOMAL LOCATION

Genetic locus: ABLIM3 (human) mapping to 5q32; Ablim3 (mouse) mapping to 18 E1.

SOURCE

ABLIM3 (C-2) is a mouse monoclonal antibody raised against amino acids 533-583 mapping within an internal region of ABLIM3 of human origin.

PRODUCT

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

ABLIM3 (C-2) is available conjugated to agarose (sc-398575 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398575 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398575 PE), fluorescein (sc-398575 FITC), Alexa Fluor® 488 (sc-398575 AF488), Alexa Fluor® 546 (sc-398575 AF546), Alexa Fluor® 594 (sc-398575 AF594) or Alexa Fluor® 647 (sc-398575 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398575 AF680) or Alexa Fluor® 790 (sc-398575 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

ABLIM3 (C-2) is recommended for detection of ABLIM3 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 ABLIM3 siRNA (h): sc-91615, ABLIM3 siRNA (m): sc-140781, ABLIM3 shRNA Plasmid (h): sc-91615-SH, ABLIM3 shRNA Plasmid (m): sc-140781-SH, ABLIM3 shRNA (h) Lentiviral Particles: sc-91615-V and ABLIM3 shRNA (m) Lentiviral Particles: sc-140781-V.

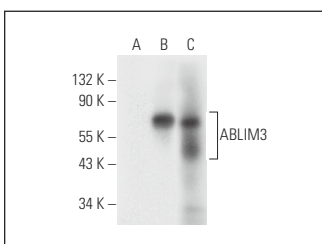
Molecular Weight of ABLIM3: 78 kDa.

Positive Controls: ABLIM3 (h22): 293 Lysate: sc-127909, c4 whole cell lysate: sc-364186 or human liver extract: sc-363766.

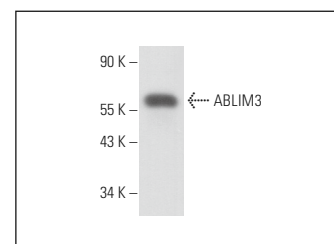
RECOMMENDED SUPPORT REAGENTS

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



ABLIM3 (C-2): sc-398575. Western blot analysis of ABLIM3 expression in non-transfected: sc-110760 (A) and human ABLIM3 transfected: sc-127909 (B) 293 whole cell lysates and human liver tissue extract (C).



ABLIM3 (C-2): sc-398575. Western blot analysis of ABLIM3 expression in c4 whole cell lysate.

SELECT PRODUCT CITATIONS

- Cichewicz, M.A., et al. 2018. MUNC, an eRNA upstream from the MYOD gene, induces a subgroup of myogenic transcripts in *trans*, independently of MyoD. *Mol. Cell. Biol.* 38: e00655-17.

STORAGE

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