

# Jaw1 (D-12): sc-390207

## BACKGROUND

Jaw1, a type II membrane protein, localizes to the endoplasmic reticulum and is regulated during lymphoid cell development. Expression of Jaw1 is restricted to lymphoid B and T cell lineages and it is down-regulated during terminal differentiation. The protein sequence of Jaw1 shares closet similarities with MRV1, a protein specifically expressed in megakaryocytes. Post-translational processing of Jaw1 at the carboxyl terminus confers its association with the ER, where it co-localizes with the ER marker BiP. The Jaw1 protein contains a coiled-coil domain in the middle-third of the protein and a membrane anchor with a conserved 36-amino acid luminal tail at the carboxy-terminus. Consistent with its expression patterns and endoplasmic reticulum localization, Jaw1 is implicated in regulating antigen receptor assembly and trafficking during lymphoid development.

## REFERENCES

- Behrens, T.W., et al. 1994. Jaw1, a lymphoid-restricted membrane protein localized to the endoplasmic reticulum. *J. Immunol.* 153: 682-690.
- Behrens, T.W., et al. 1996. Carboxyl-terminal targeting and novel post-translational processing of Jaw1, a lymphoid protein of the endoplasmic reticulum. *J. Biol. Chem.* 271: 23528-23534.
- Yang, M., et al. 1997. The transmembrane domain of a carboxyl-terminal anchored protein determines localization to the endoplasmic reticulum. *J. Biol. Chem.* 272: 1970-1975.
- Shaughnessy, J.D., Jr., et al. 1999. Mrv1, a common MRV integration site in BXH2 myeloid leukemias, encodes a protein with homology to a lymphoid-restricted membrane protein Jaw1. *Oncogene* 18: 2069-2084.

## CHROMOSOMAL LOCATION

Genetic locus: LRMP (human) mapping to 12p12.1; Lrmp (mouse) mapping to 6 G3.

## SOURCE

Jaw1 (D-12) is a mouse monoclonal antibody raised against a peptide mapping at the N-terminus of Jaw1 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.

Jaw1 (D-12) is available conjugated to agarose (sc-390207 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390207 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390207 PE), fluorescein (sc-390207 FITC), Alexa Fluor® 488 (sc-390207 AF488), Alexa Fluor® 546 (sc-390207 AF546), Alexa Fluor® 594 (sc-390207 AF594) or Alexa Fluor® 647 (sc-390207 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390207 AF680) or Alexa Fluor® 790 (sc-390207 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390207 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

Jaw1 (D-12) is recommended for detection of Jaw1 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 Jaw1 siRNA (h): sc-42926, Jaw1 siRNA (m): sc-42927, Jaw1 shRNA Plasmid (h): sc-42926-SH, Jaw1 shRNA Plasmid (m): sc-42927-SH, Jaw1 shRNA (h) Lentiviral Particles: sc-42926-V and Jaw1 shRNA (m) Lentiviral Particles: sc-42927-V.

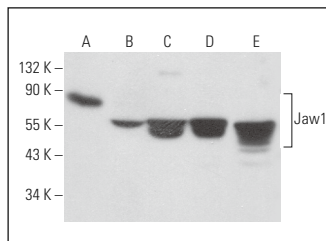
Molecular Weight of Jaw1: 69 kDa.

Positive Controls: NAMALWA cell lysate: sc-2234, BJAB whole cell lysate: sc-2207 or Ramos cell lysate: sc-2216.

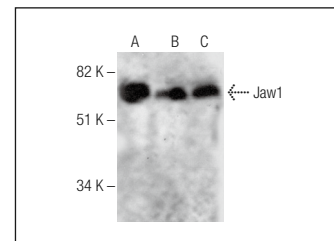
## RECOMMENDED SUPPORT REAGENTS

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



Jaw1 (D-12): sc-390207. Western blot analysis of Jaw1 expression in NAMALWA (A), CCRF-CEM (B), TK-1 (C), RAW 264.7 (D) and 3611-RF (E) whole cell lysates.



Jaw1 (D-12): sc-390207. Western blot analysis of Jaw1 expression in BJAB (A), Raji (B) and Ramos (C) 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.

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