SANTA CRUZ BIOTECHNOLOGY, INC.

CD69 (FL-199): sc-15365

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

CD69 is expressed as a disulfide-linked homodimer called the activation inducer molecule (AIM), which is composed of two differentially glycosylated forms of a single protein. CD69 is among the earliest antigens to appear after activation of T cells, B cells and NK cells. CD69 is expressed constitutively on platelets, $CD4^+$ or $CD8^+$ thymocytes, and germinal center T cells, but is absent from resting lymphocytes.

REFERENCES

1. Hamann, J., Fiebig, H. and Strauss, M. 1993. Expression cloning of the early activation antigen CD69, a type II integral membrane protein with a C-type lectin domain. J. Immunol. 150: 4920-4927.
2. Lopez-Cabrera, M., Santis, A.G., Fernandez-Ruiz, E., Blacher, R., Esch, F., Sanchez-Mateos, P. and Sanchez-Madrid, F. 1993. Molecular cloning, expression, and chromosomal localization of the human earliest lymphocyte activation antigen AIM/CD69, a new member of the C-type animal lectin superfamily of signal-transmitting receptors. J. Exp. Med. 178: 537-547.
3. Ziegler, S.F., Ramsdell, F., Hjerrild, K.A., Armitage, R.J., Grabstein, K.H., Hennen, K.B., Farrah, T., Fanslow, W.C., Shevach, E.M. and Alderson, M.R. 1993. Molecular characterization of the early activation antigen CD69: a type II membrane glycoprotein related to a family of natural killer cell activation antigens. Eur. J. Immunol. 23: 1643-1648.
4. Testi, R., D'Ambrosio, D., De Maria, R. and Santoni, A. 1994. The CD69 receptor: a multipurpose cell-surface trigger for hematopoietic cells. Immunol. Today 15: 479-483.
5. Vance, B.A., Wu, W., Ribaudo, R.K., Segal, D.M. and Kearse, K.P. 1997. Multiple dimeric forms of human CD69 result from differential addition of N-glycans to typical (Asn-X-Ser/Thr) and atypical (Asn-X-cys) glycosylation motifs. J. Biol. Chem. 272: 23117-23122.

CHROMOSOMAL LOCATION

Genetic locus: CD69 (human) mapping to 12p13.31; Cd69 (mouse) mapping to 6 F3.

SOURCE

CD69 (FL-199) is a rabbit polyclonal antibody raised against amino acids 1-199 representing full length CD69 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.

STORAGE

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

APPLICATIONS

CD69 (FL-199) is recommended for detection of CD69 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, 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 CD69 siRNA (h): sc-42800, CD69 siRNA (m): sc-42801, CD69 shRNA Plasmid (h): sc-42800-SH, CD69 shRNA Plasmid (m): sc-42801-SH, CD69 shRNA (h) Lentiviral Particles: sc-42800-V and CD69 shRNA (m) Lentiviral Particles: sc-42801-V.

Molecular Weight of CD69 dimer: 60 kDa.

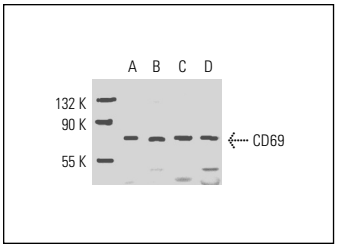
Molecular Weight of glycosylated CD69 subunits: 27/33 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or HuT 78 whole cell lysate: sc-2208.

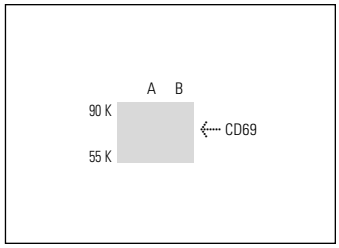
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CD69 (FL-199): sc-15365. Western blot analysis of CD69 expression in WEHI-231 (**A**), CTLL-2 (**B**), IB4 (**C**) and BW5147 (**D**) whole cell lysates.



CD69 (FL-199): sc-15365. Western blot analysis of CD69 expression in HuT 78 (**A**) and K-562 (**B**) whole cell lysates.

RESEARCH USE

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