

MIC2 (H-163): sc-28804

BACKGROUND

MIC2 (also designated CD99) is a T cell surface protein that is involved in the aggregation of lymphocytes. Two forms of MIC2, which are differentially expressed, are produced by alternative splicing. The major form induces cellular adhesion, whereas the truncated form inhibits the adhesion process. MIC2 regulates the LFA-1/ICAM-1-mediated adhesion of lymphocytes. Overexpression of the truncated form results in down-regulated expression of LFA-1. Cells with down-regulated MIC2 exhibit a Hodgkin's and Reed-Sternberg (H-RS) phenotype, indicating that MIC2 plays an important role in regulating cell function and morphology.

REFERENCES

- Gelin, C., Aubrit, F., Phalipon, A., Raynal, B., Cole, S., Kaczorek, M. and Bernard, A. 1989. The E2 antigen, a 32 kd glycoprotein involved in T-cell adhesion processes, is the MIC2 gene product. *EMBO J.* 8: 3253-3259.
- Banting, G.S., Pym, B., Darling, S.M. and Goodfellow, P.N. 1989. The MIC2 gene product: epitope mapping and structural prediction analysis define an integral membrane protein. *Mol. Immunol.* 26: 181-188.
- Hahn, J.H., Kim, M.K., Choi, E.Y., Kim, S.H., Sohn, H.W., Ham, D.I., Chung, D.H., Kim, T.J., Lee, W.J., Park, C.K., Lee, H.J. and Park, S.H. 1997. CD99 (MIC2) regulates the LFA-1/ICAM-1-mediated adhesion of lymphocytes, and its gene encodes both positive and negative regulators of cellular adhesion. *J. Immunol.* 159: 2250-2258.
- Choi, E.Y., Park, W.S., Jung, K.C., Kim, S.H., Kim, Y.Y., Lee, W.J. and Park, S.H. 1998. Engagement of CD99 induces up-regulation of TCR and MHC class I and II molecules on the surface of human thymocytes. *J. Immunol.* 161: 749-754.
- Kim, S.H., Choi, E.Y., Shin, Y.K., Kim, T.J., Chung, D.H., Chang, S.I., Kim, N.K. and Park, S.H. 1998. Generation of cells with Hodgkin's and Reed-Sternberg phenotype through downregulation of CD99 (Mic2). *Blood* 92: 4287-4295.
- Wingett, D., Forcier, K. and Nielson, C.P. 1999. A role for CD99 in T cell activation. *Cell Immunol.* 193: 17-23.

CHROMOSOMAL LOCATION

Genetic locus: CD99 (human) mapping to Xp22.33/Yp11.31.

SOURCE

MIC2 (H-163) is a rabbit polyclonal antibody raised against amino acids 23-185 representing full length mature MIC2 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

MIC2 (H-163) is recommended for detection of MIC2 of human 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 MIC2 siRNA (h): sc-35933, MIC2 shRNA Plasmid (h): sc-35933-SH and MIC2 shRNA (h) Lentiviral Particles: sc-35933-V.

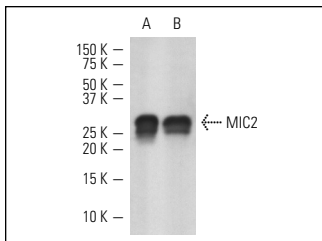
Molecular Weight of MIC2: 32 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, HUT 78 whole cell lysate: sc-2208 or MOLT-4 cell lysate: sc-2233.

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



MIC2 (H-163): sc-28804. Western blot analysis of MIC2 expression in CCRF-CEM (A) and MOLT-4 (B) whole cell lysates.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **MIC2 (12E7): sc-53148** or **MIC2 (F-8): sc-28389**, our highly recommended monoclonal alternatives to MIC2 (H-163).