SANTA CRUZ BIOTECHNOLOGY, INC.

CD74 (17-296): sc-4534 WB



BACKGROUND

The human histocompatibility leukocyte antigen (HLA) class II-associated invariant chain is composed of at least four polypeptides. One of these polypeptide chains is expressed as a membrane-bound subunit and has been designated CD74. The loading of peptide onto the class II MHC protein (MHC II) appears to be regulated by CD74, which associates with MHC II during its migration to the endosomal compartment, where class II binds pep-tide. CD74 is expressed by cells of both T lymphocyte and B lymphocyte lineages. In fact, CD74 is broadly expressed in normal B lymphocytes, regardless of their histocompatibility leukocyte antigen (HLA) phenotype, while a subset of peripheral T lymphocytes that are MHC II negative do not express CD74.

REFERENCES

- Sarker, A.B., Akagi, T., Jeon, H.J., Miyake, K., Murakami, I., Yoshino, T., Takahashi, K., and Nose, S. 1992. Bauhinia purpurea–a new paraffin section marker for Reed-Sternberg cells of Hodgkin's Disease. A comparison with Leu-M1 (CD15), LN2 (CD74), peanut agglutinin, and Ber-H2 (CD30). Amer. J. Pathol. 141: 19-23.
- Wilson, K.M., Labeta, M.O., Pawelec, G., and Fernandez, N. 1993. Cellsurface expression of human histocompatibility leucocyte antigen (HLA) class II-associated invariant chain (CD74) does not always correlate with cell-surface expression of HLA class II molecules. Immunol. 79: 331-335.
- Lu, Y., Ussery, G.D., Jacim, M., Tschickardt, M., Boss, J.M., and Blanck, G. 1994. Retinoblastoma protein regulation of surface CD74 (invariant chain) expression in breast carcinoma cells. Mol. Immunol. 31: 1365-1368.
- Henne, C., Schwenk, F., Koch, N., and Moller, P. 1995. Surface expression of the invariant chain (CD74) is independent of concomitant expression of major histocompatibility complex class II antigens. Immunol. 84: 177-182.
- 5. Shih, N.Y. and Floyd-Smith, G. 1995. Invariant chain (CD74) gene regulation: enhanced expression associated with activation of protein kinase C δ in a murine B lymphoma cell line. Mol. Immunol. 32: 643-650.
- Loachim, H.L., Pambuccian, S.E., Hekimgil, M., Giancotti, F.R., and Dorsett, B.H. 1996. Lymphoid monoclonal antibodies reactive with lung tumors. Amer. J. Surg. Pathol. 20: 64-71.

SOURCE

CD74 (17-296) is expressed in *E. coli* as a 58 kDa tagged fusion protein corresponding to amino acids 17-296 of CD74 of human origin.

PRODUCT

CD74 (17-296) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 μg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

CD74 (17-296) is suitable as a Western blotting control for sc-5438 and sc-20082.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

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