SANTA CRUZ BIOTECHNOLOGY, INC.

Forssman Antigen (M1/87): sc-23939

BACKGROUND

A glycolipid, cross-species antigen that induces production of antisheep hemolysin. It is present on the tissue cells of many species but absent in humans. It is found in many infectious agents. The Forssman antigen was named after the Swedish pathologist John F. Forssman and later identified as the GalNAc£\(1-3)GalNAc£](1-R) disaccharide group. Forssman specificity was described in many animal species, plants and bacteria. In the mouse, Forssman antigen is a developmental and differentiation antigen. Expression of Forssman antigen in macrophages can be modulated by cytokines. Forssman antigen, a heterogenetic antigen inducing the production of anti-sheep hemolysin, occurring in various unrelated animals, mainly in the organs but not in the erythrocytes (guinea pig, horse), but sometimes only in the erythrocytes (sheep), and occasionally in both (chicken). In the original and strict sense, the antigen is typified by that found in the guinea pig kidney and characterized by heat stability and solubility in alcohol; the antigenic determinant is polysaccharide in nature. Its antibody is absorbed by tissues containing the antigen and contains no lysin for bovine cells and little or no agglutinin for sheep cells. The term is also used loosely to refer to any antigen producing sheep hemolysin, but antibodies to it are not identical, as they are in the case of the true Forssman (or F) antigen.

REFERENCES

1. Springer, T., et al. 1978. Monoclonal xenogeneic antibodies to murine cell surface antigens: identification of novel leukocyte differentiation antigens. Eur. J. Immunol. 8: 539-551.
2. Stern, P.L., et al. 1978. Monoclonal antibodies as probes for differentiation and tumor-associated antigens: a Forssman specificity on teratocarcinoma stem cells. Cell 14: 775-783.
3. Bethke, U., et al. 1987. Forssman glycolipid, an antigenic marker for a major subpopulation of macrophages from murine spleen and peripheral lymph nodes. J. Immunol. 138: 4329-4335.
4. Monner, D.A., et al. 1993. Surface expression of Forssman glycosphingolipid antigen on murine bone marrow-derived macrophages is subject to both temporal and population-specific regulation and is modulated by IL-4 and IL-6. Immunobiol. 188: 82-98.
5. Leenen, P.J., et al. 1994. Markers of mouse macrophage development detected by monoclonal antibodies. J. Immunol. Methods 174: 5-19.
6. Cruse, J.M., et al. 1995. Illustrated Dictionary of Immunology. CRC Press, Boca Raton. 116.

SOURCE

Forssman Antigen (M1/87) is a rat monoclonal antibody raised against C57BL/10 mouse spleen T lymphocytes.

PRODUCT

Each vial contains 200 µg IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

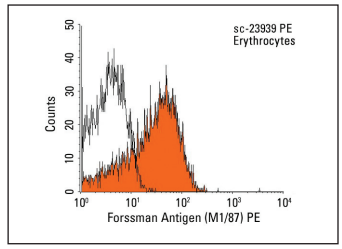
For research use only, not for use in diagnostic procedures.

APPLICATIONS

Forssman Antigen (M1/87) is recommended for detection of Forssman Antigen of mouse, human and sheep origin by flow cytometry (1 µg per 1 x 10^6 cells).

Positive Controls: mouse erythroblasts, mouse stromal macrophages or mouse thymic epithelial cells.

DATA



Forssman Antigen (M1/87): sc-23939. Indirect FCM analysis of sheep erythrocytes stained with Forssman Antigen (M1/87), followed by PE-conjugated goat anti-rat IgM. Black line histogram represents the isotype control, normal rat IgM: 3885.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.