

# Blood Group AB antigen (Z5H-2/Z2A): sc-52370

## BACKGROUND

Blood-group antigens are generally defined as molecules formed by sequential addition of saccharides to the carbohydrate side chains of lipids and proteins detected on erythrocytes and certain epithelial cells. The A, B and H antigens are reported to undergo modulation during malignant cellular transformation. Blood group related antigens are usually mucin-type, and are detected on erythrocytes, certain epithelial cells, and in secretions of certain individuals. 16 genetically and biosynthetically distinct but inter-related specificities belong to this group of antigens, including A (1 and 2), B, H (1 and 2), M, N, Lewis A, Lewis B, Lewis X, Lewis Y, and precursor type 1 chain antigens.

## REFERENCES

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2. Watkins, W.M. 1980. Biochemistry and genetics of the ABO, Lewis, and P blood group systems. *Adv. Hum. Genet.* 10: 1-136, 379-385.
3. Boren, T., Falk, P., Roth, K.A., Larson, G. and Normark, S. 1993. Attachment of *Helicobacter pylori* to human group antigens. *Science* 262: 1892-1895.
4. Appelmek, B.J., Simoons-Smit, I., Negrini, R., Moran, A.P., Aspinall, G.O., Forte, J.G., De Vries, T., Quan, H., Verboom, T., Maaskant, J.J., Ghiara, P., Kuipers, E.J., Bloemena, E., Tadema, T.M., Townsend, R.R., et al. 1996. Potential role of molecular mimicry between *Helicobacter pylori* lipopolysaccharide and host Lewis blood group antigens in autoimmunity. *Infect. Immun.* 64: 2031-2040.
5. Ilver, D., Arnqvist, A., Ogren, J., Frick, I.M., Kersulyte, D., Incecik, E.T., Berg, D.E., Covacci, A., Engstrand, L. and Boren, T. 1998. *Helicobacter pylori* adhesin binding fucosylated histo-blood group antigens revealed by retagging. *Science* 279: 373-377.

## CHROMOSOMAL LOCATION

Genetic locus: ABO (human) mapping to 9q34.2.

## SOURCE

Blood Group AB antigen (Z5H-2/Z2A) is a mouse monoclonal antibody raised against antigen AB of blood cells of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blood Group AB antigen (Z5H-2/Z2A) is available conjugated fluorescein (sc-52370 FITC, 100 tests in 2 ml), for WB (RGB), IF, IHC(P) and FCM.

## STORAGE

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

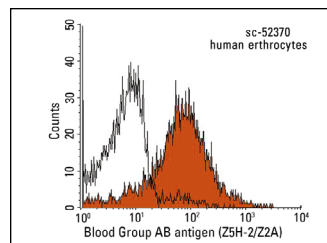
## RESEARCH USE

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

## APPLICATIONS

Blood Group AB antigen (Z5H-2/Z2A) is recommended for detection of Blood Group AB antigen of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1  $\mu$ g per  $1 \times 10^6$  cells).

## DATA



Blood Group AB antigen (Z5H-2/Z2A): sc-52370. Indirect FCM analysis of human erythrocytes stained with Blood Group AB antigen (Z5H-2/Z2A), followed by PE-conjugated goat anti-mouse IgM: sc-3768. Black line histogram represents the isotype control, normal mouse IgM: sc-3881.

## SELECT PRODUCT CITATIONS

1. He, X., Ding, L., Cao, K., Peng, H., Gu, C., Li, Y., Li, D., Dong, L., Hong, X., Wang, X., Fu, M., Qiu, C., Zhu, C., Zhang, Z., Song, S., Wang, C., Jiang, Z., Xie, Y., Qi, Z., Zhao, C., Zhao, P., Zhang, X. and Xu, J. 2021. A human cell-based SARS-CoV-2 vaccine elicits potent neutralizing antibody responses and protects mice from SARS-CoV-2 challenge. *Emerg. Microbes Infect.* E-published.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.