



# Blood Group A1, A2, A3 antigen (1V015): sc-70427

## 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. Sixteen 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. Donald, A.S. 1982. A-active trisaccharides isolated from A1 and A2 blood-group-specific glycoproteins. *Eur. J. Biochem.* 120: 243-249.
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4. Staub Nielsen, L., Eiberg, H. and Mohr, J. 1983. Another case of a lymphocytotoxic antibody with blood group A1 Leb and A Led associated specificity. *Tissue Antigens* 21: 177-183.
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7. Chung, W.Y., Gardiner, D.L., Hyland, C., Gattton, M., Kemp, D.J. and Trenholme, K.R. 2005. Enhanced invasion of blood group A1 erythrocytes by *Plasmodium falciparum*. *Mol. Biochem. Parasitol.* 144: 128-130.
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## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## CHROMOSOMAL LOCATION

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

## SOURCE

Blood Group A1, A2, A3 antigen (1V015) is a mouse monoclonal antibody raised against blood antigen A1, A2 and A3 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.

## APPLICATIONS

Blood Group A1, A2, A3 antigen (1V015) is recommended for detection of Blood Groups A1, A2 and A3 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).

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgM-HRP: sc-2064 (dilution range: 1:500-1:5,000), TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L PLUS-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgM-FITC: sc-2082 (dilution range: 1:100-1:400) or goat anti-mouse IgM-TR: sc-2983 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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