**BACKGROUND**

Glycophorins A, B and C are sialoglycoproteins of the human erythrocyte membrane, which bear the antigenic determinants for the MN, Ss and Gerbich blood groups, respectively. Glycophorins span the membrane once and present their amino-terminal end to the extracellular surface of the human erythrocyte. The genetic array of expressed Glycophorin surface antigens on erythrocytes defines the blood group phenotype of the individual. The human Glycophorin A gene maps to chromosome 4q31.21, contains 7 exons which are 97% homologous to Glycophorin B, and encodes a 150 amino acid protein. The human Glycophorin B gene maps to chromosome 4q31.21 and encodes a 91 amino acid protein. The human Glycophorin C gene maps to chromosome 2q14-q21 and contains four exons. Glycophorin C transcript can generate two protein isoforms. Isoform 1 includes all four exons and encodes the full length 128 amino acid protein. Isoform 2 is missing exon 2 and encodes a 109 amino acid protein, which specifies the Yus subtype of the Gerbich phenotype.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: GYP A (human) mapping to 4q31.21; Gypa (mouse) mapping to 8 C2.

**SOURCE**

Glycophorin A (YTH89.1) is a rat monoclonal antibody raised against red blood cells of human origin followed by purified Glycophorin A.

**PRODUCT**

Each vial contains 200 µg IgG2b in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Glycophorin A (YTH89.1) is available conjugated to either phycoerythrin (sc-59182 PE) or fluorescein (sc-59182 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

**APPLICATIONS**

Glycophorin A (YTH89.1) is recommended for detection of Glycophorin A of mouse, rat and 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)], immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).


Molecular Weight of Glycophorin A head-head dimer: 16 kDa.

Molecular Weight of Glycophorin A head-tail dimer: 38 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, SK-N-SH cell lysate: sc-2410 or MEG-01 cell lysate: sc-2283.

**DATA**

See our website at www.scbt.com for detailed protocols and support products.

**SELECT PRODUCT CITATIONS**


**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.