

# Glycophorin A (5G119): sc-71159

## 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 seven exons which are 97% homologous to Glycophorin B and encodes a 150 amino acid protein. The human Glycophorin B gene also maps to chromosome 4q31.21 and encodes a 91 amino acid protein. The human Glycophorin C gene maps to chromosome 2q14.3 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 Glycophorin C protein. Isoform 2 is missing exon two and encodes a 109 amino acid protein, which specifies the Yus subtype of the Gerbich phenotype.

## CHROMOSOMAL LOCATION

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

## SOURCE

Glycophorin A (5G119) is a mouse monoclonal antibody raised against membrane preparation from splenic hairy cell leukemia cells of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

Glycophorin A (5G119) 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Glycophorin A siRNA (h): sc-42882, Glycophorin A siRNA (m): sc-44730, Glycophorin A shRNA Plasmid (h): sc-42882-SH, Glycophorin A shRNA Plasmid (m): sc-44730-SH, Glycophorin A shRNA (h) Lentiviral Particles: sc-42882-V and Glycophorin A shRNA (m) Lentiviral Particles: sc-44730-V.

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

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

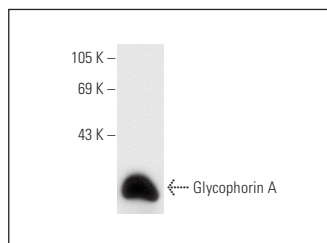
Positive Controls: K-562 cell lysate: sc-24789 or SK-N-SH cell lysate: sc-2410.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
- 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.
- 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



Glycophorin A (5G119): sc-71159. Western blot analysis of Glycophorin A expression in K-562 whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Verma, N., et al. 2023. Aβ efflux impairment and inflammation linked to cerebrovascular accumulation of amyloid-forming amylin secreted from pancreas. *Commun. Biol.* 6: 2.

## RESEARCH USE

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

## PROTOCOLS

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



See **Glycophorin A (R10): sc-53905** for Glycophorin A antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.