

Glycophorin C (h): 293T Lysate: sc-111667

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 4q31.22, contains 7 exons which are 97% homologous to Glycophorin B and encodes a 150 amino acid protein. The human Glycophorin B gene also maps to chromosome 4q31.22 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 4 exons and encodes the full length 128 amino acid Glycophorin C protein. Isoform 2, also known as Glycophorin D, is missing exon 2 and encodes a 109 amino acid protein, which specifies the Yus subtype of the Gerbich phenotype.

REFERENCES

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4. Young, M.T., et al. 2003. Distinct regions of human Glycophorin A enhance human red cell anion exchanger (band 3; AE1) transport function and surface trafficking. *J. Biol. Chem.* 278: 32954-32961.
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CHROMOSOMAL LOCATION

Genetic locus: GYPC (human) mapping to 2q14.3.

PRODUCT

Glycophorin C (h): 293T Lysate represents a lysate of human Glycophorin C transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Glycophorin C (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Glycophorin C antibodies. Recommended use: 10-20 µl per lane.

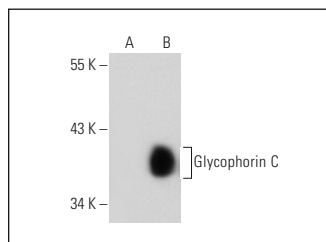
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Glycophorin C (3H2009): sc-71161 is recommended as a positive control antibody for Western Blot analysis of enhanced human Glycophorin C expression in Glycophorin C transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

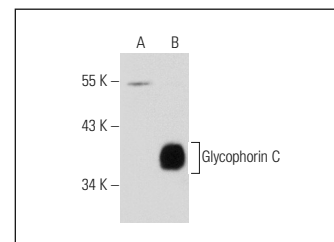
RECOMMENDED SUPPORT REAGENTS

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.

DATA



Glycophorin C (3H2009): sc-71161. Western blot analysis of Glycophorin C expression in non-transfected: sc-117752 (A) and human Glycophorin C transfected: sc-111667 (B) 293T whole cell lysates.



Glycophorin C (BRIC10): sc-59183. Western blot analysis of Glycophorin C expression in non-transfected: sc-117752 (A) and human Glycophorin C transfected: sc-111667 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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