

**International Blood Group  
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<b>Antigen</b>	Glycophorin A (extracellular domain) / CD235a
<b>Clone</b>	BRIC 102
<b>Product Code</b>	9502
<b>Immunoglobulin Class</b>	Mouse IgM, kappa light chain

**Protein Development  
and Production Unit****Tel:** +44 (0)117 921 7500**Fax:** +44 (0)117 912 5796**Website:** <http://ibgri.blood.co.uk>**Email:** [enquiries.IBGRL@nhsbt.nhs.uk](mailto:enquiries.IBGRL@nhsbt.nhs.uk)**Antigen Description and Distribution**

Glycophorin A (GPA) (Mr 43kDa as a monomer and 86kDa as a dimer) is the major sialoglycoprotein of human erythrocytes and is the most abundant, together with band 3 (anion transporter protein), with which it appears to be associated. The complete amino acid sequence and sites of glycosylation are known. GPA consists of 131 amino acids, which constitute three domains: (i) a heavily glycosylated N-terminal extracellular domain of 72 amino acids, (ii) a hydrophobic intramembranous domain of 23 amino acids, and (iii) a C-terminal cytoplasmic domain of 36 amino acids<sup>1,2</sup>. GPA is generally present in the membrane in dimeric form, with the polypeptides associated at the hydrophobic intramembranous domain. It probably complexes with other membrane glycoproteins. GPA is a marker for erythroid cells. There are about 3-12 x 10<sup>5</sup> GPA molecules per erythrocyte. Rare individuals lacking GPA are known<sup>1</sup>.

**Clone**

BRIC 102 was made in response to intact erythrocytes. The antibody identifies GPA in erythrocytes by immunoblotting under reducing and non-reducing conditions. BRIC 102 recognises an extracellular epitope on GPA.

**References**

1. Anstee DJ (1990) Vox Sang. **58**, 1-20 (Review).