

**International Blood Group  
Reference Laboratory**500 North Bristol Park  
Northway  
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BS34 7QH

<b>Antigen</b>	Human Blood Group Rh D (ISBT No. 4001) / CD 240D
<b>Clone</b>	BIRMA D6
<b>Product Code</b>	9435
<b>Immunoglobulin Class</b>	Human IgG1 $\kappa$ kappa light chain m(1.17) (a,z)

**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**

Rh is the most complex of the human blood group systems, with 45 well-defined antigens. The most immunogenic and clinically important antigen of the Rh system is the Rh D antigen (Rh<sub>1</sub> or Rh<sub>0</sub>). The Rh D antigen is expressed on the extracellular loops of a transmembrane polypeptide of around Mr 30000<sup>1</sup>.

**Clone**

The cell line producing BIRMA D6 is a human heterohybridoma derived from the fusion of CD40 expanded B cells, from the peripheral blood of a hyperimmunised anti-D plasmapheresis donor, with X63Ag8.653 myeloma cells<sup>2</sup>. BIRMA D6 was submitted to the third international workshop on monoclonal antibodies against human red cells, Nantes 1996<sup>3</sup>. BIRMA D6 reacts as an indirect agglutinin with all Rh D positive red cells including those of the rare D<sup>VI</sup> type<sup>3</sup>.

**References**

1. Cartron, J-P, (1994) *Blood Reviews* **8**, 199-212.
2. Thompson *et al* (1994) *J. Immunol. Methods*, **175**; 137-140.
3. Rouger P Muller JY (eds) (1997) *Proceedings of the third International workshop and symposium on monoclonal antibodies against human red cells and related antigens*, Nantes 1996.