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Antigen	Human Blood Group Rh D (ISBT No. 4001) CD 240D
Clone	FOG-1
Product Code	9464
Immunoglobulin Class	Human IgG1, kappa light chain

Antigen Description and Distribution

The Rh D antigen (Rh_1 or Rh_o) is clinically the most important of the Rh blood group system. It is expressed on the extracellular loops of a transmembrane polypeptide of around Mr 30000[1]. Estimated numbers of Rh D sites recognised by FOG-1 on Rh D positive cells are between 13460 to 16040 on CDe/cde (R_1r) cells and 35400 to 36900 on cDE/cDE (R_2R_2) cells[2]. Rh D positive infants born to Rh D negative women may suffer from haemolytic disease of the newborn. The disease can be prevented by administration of anti-D post partum or antenatally. Dosage of anti-D depends on the size of feto-maternal hemorrhage (FMH). In humans the Rh D antigen is expressed solely on the erythrocytes of Rh D positive individuals. 85% of Caucasians are Rh D positive.

Clone

FOG-1 is produced by mouse-human heterohybridoma derived from B cells of the peripheral blood of an immunised Rh D negative donor. This monoclonal anti-D reacts as an indirect agglutinin with all Rh D positive red cells tested except those of the rare D^{VI} type.

References

1. Cartron, J-P, (1994) Blood Reviews **8**, 199-212.
2. Gorick B. *et al*, (1993) Vox Sanguinis **65**, 136-140.