



NHS Blood & Transplant

500 North Bristol Park
Northway
Filton
Bristol
BS34 7QH

Antigen H type 1 and 2 (ISBT No. 18001) / CD 173

Clone BRIC 39

Product Code 9419

Tel: +44 (0)117 921 7200
Fax: +44 (0)117 912 5796
Web: <http://ibgri.blood.co.uk>

Immunoglobulin Class Mouse IgM, λ lambda light chain

Antigen Description and Distribution

H antigens are carried on the non-reducing termini of the carbohydrates of glycoproteins and glycolipids. The H determinant structure is Fuc(α 1-2) Gal(β 1-R). Type 1 and type 2 H (CD 173) are determined by the subterminal (peripheral core) carbohydrate sequence. In H type 1 it is Fuc(α 1-2) Gal(β 1-3) GlcNAc, in H type 2 it is Fuc(α 1-2) Gal(β 1-4) GlcNAc. H is the precursor of the A and B histo-blood group antigens, which are formed by the addition of GalNAc(α 1-3) or Gal(α 1-3) respectively, to the galactose of H¹. In man, H active substances are found on the erythrocytes, cells and tissues, and in the body fluids, linked to lipids (glycosphingolipids) or to proteins (glycoproteins). In various animals, H antigens occur in the cells and tissues, but not generally on erythrocytes. The synthesis of H type 1 and H type 2 in man in different tissues is controlled by either of the two linked genes *Se* or *H*, which code for 2-fucosyl transferases².

Clone

BRIC 39 was made in response to immunisation with HLe^b active ovarian cyst glycoprotein. It recognises both H type 1 and H type 2 structures. In haemagglutination - inhibition tests, the antibody is inhibited by ovarian cyst glycoproteins with A, B or HLe^b activity, but not inhibited by those with Le^a activity. It is also inhibited by Synsorbs H type 1, H type 2 and Le^b, but not Le^a, A or B.

References

1. Clausen H, Hakomori S. (1989) Vox Sang. **56** 1 - 20 (Review).
2. Oriel R, Le Pendu J, Mollicone R. (1986) Vox Sang **51** 161 - 171 (Review).

Synsorb is a Trade Mark of Chembiomed, Edmonton, Canada.