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Antigen	H (ISBT No. 18001) / CD 173
Clone	BRIC 231
Product Code	9421
Immunoglobulin Class	Mouse IgG1, kappa 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* and *H*, which code for 2-fucosyl transferases².

Clone

BRIC 231 was made in response to immunisation with HEL cells. In haemagglutination tests it failed to react with Oh (Bombay) erythrocytes, and reacted more weakly than normal with A1 erythrocytes. BRIC 231 was absorbed by Synsorb H type 2, but not H type 1, Le^a, Le^b, A or B Synsorbs. BRIC 231 was used in a workshop for glycomapping of the specificities of Lewis antibodies³.

References

1. Clausen H, Hakomori S. (1989) *Vox Sang.* **56** 1 - 20 (Review).
2. Oriel R, *et al* (1986) *Vox Sang* **51** 161 - 171 (Review).
3. Complete List of Authors: Williams, Eleanor; Auckland University of Technology, Centre for Kode Technology Innovation, School of Engineering Korchagina, Elena; Russian Academy of Sciences,, Shemyakin Institute of Bioorganic Chemistry Frame, Tom; Immucor Inc, Ryzhov, Ivan; Russian Academy of Sciences, Shemyakin Institute of Bioorganic Chemistry Bovin, Nicolai; Russian Academy of Sciences,, Shemyakin Institute of Bioorganic Chemistry Henry, Stephen; Auckland University of Technology, Centre for Kode Technology Innovation, School of Engineering. This publication was a workshop held in 2014/15. Glycomapping the fine specificity of monoclonal and polyclonal Lewis antibodies with type-specific Lewis kodecytes and FSL constructs printed on paper Transfusion Manuscript ID: Trans-2015-0519.R1.

Synsorb is a tradename of Chembiomed, Edmonton, Canada.