



## BLOOD GROUPING REAGENTS

### ANTI A AND ANTI B MONOCLONAL

ABO grouping is determined by testing unknown red cells against known anti A, anti B and anti A+B antibodies. The presence or absence of agglutination of the red cells indicates the presence or absence the corresponding antigen.

Blood grouping reagents made with monoclonal antibodies have the added advantage of constant identity and absolute reproducibility of their specificity.

### REAGENTS COMPOSITION

ANTI A - Cell line 9113D10. Phosphate buffer. Sodium azide <0.1%. Blue colour. Dye used: Patent Blue

ANTI B - Cell line 9621A8. Phosphate buffer. Sodium azide <0.1%. Yellow colour. Dye used: Tartrazine.

### PRECAUTIONS

Components of different human origin have been tested and found to be negative for the presence of antibodies anti HIV 1+2 and anti-HCV, as well as for HBsAg. However, the controls should be handled cautiously as potentially infectious. Protective clothing should be worn when handling the reagent, such as disposable gloves.

### ANTI-D IgM/IgG

#### INTENDED USE

These reagents are designed to determine the presence of the blood Rhesus antigen D on the surface of human red blood cells by manual method. The Neg Control is used as a negative reagent control and has been designed to be tested under the same conditions and in parallel with ANTI-D reagents. The result of the Neg Control determination enables interpretation of the Rh(D) typing result obtained.

#### PRINCIPLES OF THE TEST

The manual technique employed in a tube, utilizes the principle of hemagglutination. Test red blood cells bearing an antigen agglutinate in the presence of the reagent containing the corresponding antibody:

- Either in the direct hemagglutination method, when they come into contact with the reagent containing the antibody (type: IgM).
- Or in the indirect hemagglutination method: antiglobulin test in the event of use of an IgG antibody.

### ANTI-HUMAN GLOBULIN (AHG)

Anti-Human Globulin Anti-IgG, -C3d; Polyspecific is used for the direct antiglobulin test to demonstrate the in-vivo coating of red blood cells with antibody molecules and/or complement components (such as auto antibodies, maternal antibodies in hemolytic disease of the new born, alloantibodies against red blood cells in transfusion reactions).

#### PRINCIPLES OF THE TEST

The test principle is a hemagglutination test. Anti-Human Globulin Anti-IgG, -C3d; polyspecific acts as a link between the antibody and/or complement coating of neighbouring red blood cells and induces agglutination. Uncoated red blood cells will not agglutinate.

#### REAGENT

Anti-Human Globulin Anti-IgG, -C3d; Polyspecific is a blend of rabbit anti-IgG and murine monoclonal anti-complement (murine IgM Anti C3d, Bric 8). The anti-IgG component contains antibody reactivity against light IgG chains and thus may also agglutinate IgA or IgM coated red blood cells. The anti-complement component consists of murine monoclonal IgM anti-C3d-antibody reactive with C3b- and C3dcoated red blood cells. Antibodies are diluted in a isotonic saline solution containing bovine albumin and as colorant Patent Blue & Tartrazin.

### BOVINE SERUM ALBUMIN (BSA) 22%

In vitro diagnostic enhancement media for professional use. 2% bovine serum albumin is prepared from a mixture of bovine serum albumin and buffered saline. Free from stabilisers and non-specific agglutinins. Caprylate free.

### MAIN HAZARDS

Possible harm or irritation may occur through exposure to these products by inhalation or ingestion or by contact with the eyes, skin or mucous membranes. Some product components are materials of biological origin. Since no test or production method can guarantee that such materials will not transmit infection, due care should be exercised in their handling. Sodium azide is used as a preservative. This material is toxic, may form explosive compounds with plumbing metals (lead and copper).

### LOW IONIC STRENGTH SOLUTION

Low Ionic Strength Solution is used as a potentiator between antibodies and red blood cells (RBC). The reduced quantity of NaCl in LISS allows more efficient agglutination between the antibodies and RBCs.

