Package size

**Ref** 805200100 Vol 50 mL MB2

**Intended Use**

MB2 is used for the **TANGO® optimo**, as a potentiator for red blood cells applied in the indirect antiglobulin (IAT) test for crossmatch, antibody screening and -identification, as well as antigen typing with coombsreceptive Blood Grouping Reagents.

**Summary**

In 1946 Mollison and Polley discovered that by reducing ion strength with a Low Ionic Strength Solution (LISS) antigen-antibody-reaction is considerably accelerated on blood group typing tests. The original formulation has been modified in MB2 so that an improved sensitivity is achieved.

MB2 is a modified LISS solution used as suspension medium for red cells and contributing to reaction time reduction while at the same time increasing reaction strength. In antibody determination with coombsreceptive antisera, MB2 can be used in addition to the incubation medium.

**Low Ionic Strength Salt Solutions (LISS)** increase the rate of antigen-antibody complex formation. 1. Additionally, since antibody uptake is increased, incubation times of antisera-antibody reactions can be shortened. Excessive amounts of ions can interfere with binding of antibody to antigen. 2. Enhancement is achieved by decreasing the amount of ions in solution.

**Principle**

**TANGO® optimo**

Red blood cells are suspended in MB2/Alsever Solution for cross match, DAT, weak D typing and in MB2 for antibody screening, identification to be tested in the solid phase antiglobulin test Solidscreen II (please also refer to instructions for use of Solidscreen II).

The Solidscreen II well is coated with Protein A. Protein A is a component of the cell wall of Staphylococcus aureus and has a very high affinity for the Fc portion of most immunoglobulin classes. 3. For a) the plasma or serum and red blood cells (RBDC, donor or patient red blood cells) are added to the Protein-A coated well. Sensitization of the red cell occurs if the corresponding antibody is present for the antigen on the red cell.

For b) Solidscreen II Anti-D Blend and donor red blood cells are added to the Protein A coated well. Sensitization of the red blood cell occurs if D antigen is present on the red blood cell.

Following incubation, and two wash processes to remove unbound antisera, Anti-Human Globulin Anti-IgG Solidscreen II is added to the well. Following centrifugation, the well is evaluated. A smooth monolayer of cells is indicative of a positive reaction. A compact button of cells in the middle of the well is indicative of a negative reaction.

**Turbine test**

The test principle is a hemagglutination test. MB2 reduces the incubation time in an indirect antiglobulin-test from 60 to 10 minutes while at the same time increasing reaction sensitivity.

**Reagent**

MB2 is a low-ionic-strength solution containing phosphat buffer, glycine and bovine albumin. It is supplied in a 50mL glass bottle. The reagent is stable for seven days when used immediately after loading on the **TANGO® optimo**. The reagent is stable until the expiration date when opened and used for the tube test.

- Preservative: 0.1% sodium azide
- No U.S. Standard of Potency
- In-Form-tra optimo
- Use as furnished, do not dilute

**Precautions**

- For in vitro diagnostic use.
- Store at 2 to 8°C.
- Warning: Contains sodium azide, which may react with lead or copper plumbing to form explosive azides. If discarded in the sink, flush with large amounts of water to dilute. Sodium azide may be highly toxic by inhalation, ingestion, or skin absorption.
- Caution: This product contains Natural Rubber Latex Which May Cause Allergic Reactions
- Resuspend Reagent Red Blood Cells prior to use and insert cell mixers before loading on **TANGO® optimo**
- Do not use if markedly turbid. Turbidity may be an indication of reagent contamination.
- Do not use past seven days on the **TANGO® optimo**.
- Do not use past the expiration date printed on the bottle.
- Only use specimens collected with gel separators.

**Specimen Collection**

**TANGO® optimo**

**For antibody screening, -identification (Indirect Antiglobulin Test IAT)**

Fresh samples of EDTA or citrate anticoagulated whole blood samples can be used for antibody screening, -identification with the **TANGO® optimo**. Samples collected following standard blood sampling guidelines are acceptable. The specimen should be tested as soon as possible after collection. If testing is delayed, EDTA and citrated specimens should be stored at 2 to 8°C. Use of EDTA anticoagulated samples older than seven days should be avoided unless there is no other alternative since antibody reactivity has been shown to decrease in older samples. Stored samples should be allowed to reach room temperature prior to testing. Blood specimens exhibiting gross hemolysis or contamination should not be used.

**For crossmatch (Indirect Antiglobulin Test)**

Fresh samples of EDTA or citrate anticoagulated whole blood samples must be used for the weak D test. Samples collected following standard blood sampling guidelines are acceptable. The specimen should be tested as soon as possible after collection. If testing is delayed, EDTA and citrated specimens should be stored at 2 to 8°C. EDTA anticoagulated whole blood samples may be tested for up to seven days following collection. Donor blood stored in citrate anticoagulant at 1 to 6°C may be tested until the expiration date of the donor unit. The red blood cells to be tested must be prepared prior to testing. Refer to instructions in the **TANGO® optimo** Users Guide. Stored samples should be allowed to reach room temperature prior to testing. Blood specimens exhibiting gross hemolysis or contamination should not be used.

**Turbine test**

**For antibody screening, -identification (Indirect Antiglobulin Test IAT)**

Fresh samples of EDTA or citrate anticoagulated whole blood can be used for antibody screening, identification with the **TANGO® optimo**. Samples collected following standard blood sampling guidelines are acceptable. The specimen should be tested as soon as possible after collection. If testing is delayed, EDTA anticoagulated whole blood samples should be stored at 2 to 8°C. EDTA anticoagulated whole blood samples may be tested for up to seven days following collection. Donor blood stored in citrate anticoagulant at 1 to 6°C may be tested until the expiration date of the donor unit. The red blood cells to be tested must be prepared prior to testing. Refer to instructions in the **TANGO® optimo** Users Guide. Stored samples should be allowed to reach room temperature prior to testing. Blood specimens exhibiting gross hemolysis or contamination should not be used.

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For Reference Use Only

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If a test result is not equal to the positive control, it must be interpreted with caution. Any deviation from these instructions is the sole responsibility of the user. Used tests must be discarded as hazardous material. Manage waste according to national regulations.

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Bibliography
1. Issitt, Peter D., and Issitt, Charla H. Applied Blood Group Serology Oxnard, Calif.: Bibliography
3. KJ Reis et al. Journal of Immunology 1984

Key: Underline = Addition of changes  ▼ = Deletion of text