

## Methyl red test reagent (MR Reagent)

### M1508186

---

Store at room temperature long term (12 months).

#### Introduction:

1. Biochemical tests (also known as biochemical reactions) of bacteria refer to the process of determining metabolic products by biochemical methods, as different bacteria have their own enzyme systems, varying in the ability to decompose substrates and thus producing different metabolic products. Biochemical tests mainly include carbohydrate biochemical tests, amino acid and protein metabolism tests, carbon and nitrogen source utilization tests, and enzyme metabolism tests. Different bacteria differ in their ability to decompose proteins; generally, extracellular enzymes first decompose proteins into short peptides or amino acids, which then invade bacterial cells and are further decomposed into amino acids by intracellular enzymes.
2. Methyl Red Test Reagent (MR Reagent) has methyl red as the active ingredient; a color change from orange to red indicates a positive result, which is suitable for the identification of various bacteria. This reagent is for research use only and not suitable for clinical diagnosis or other purposes.

#### Materials to Be Prepared by the User:

1. Test tubes or centrifuge tubes, inoculation loops, constant temperature incubator.
2. Glucose peptone water medium.

#### Operating Procedures (For Reference Only):

1. Inoculate the test bacteria into the glucose peptone water medium, and incubate at 35–37°C in a constant temperature incubator for 24–48 hours.
2. Take out the culture solution and add 1–2 drops of MR Reagent along the tube wall.
3. A color change from orange to red indicates a positive result; a colorless appearance indicates a negative result.

#### Staining Results:

Red: Positive.

No color change: Negative.

#### Matters needing attention:

1. When culturing bacteria, take care to avoid cross-contamination.
2. All reagents should be stored in sealed containers. Once opened, their shelf life will be significantly shortened.
3. The Methyl Red Test Reagent is for research purposes only and not for clinical diagnosis.



- 
4. For your safety and health, please wear a lab coat and disposable gloves during operation.
  5. Please use the reagent as soon as possible after opening to avoid affecting the results of subsequent experiments.

aladdin®