

## TMB Soluble Reagent (High Sensitivity)

**Description** This liquid substrate for peroxidase consists of tetramethylbenzidine (TMB) plus dilute hydrogen peroxide in a single-reagent stabilized form. The reagent has been specifically formulated for measuring peroxidase in ELISA systems. This reagent is stable for long-term storage and provides sensitivity equal to, or greater than, that of OPD.

- **Activating Agents:** Peroxidase
- **Light Sensitivity:** Negligible for short exposure times
- **Reaction Volume:** 50 - 100 ul per well in microtiter plates
- **Reaction Time:** Approximately 15 minutes (Range 5 - 60 min.)
- **Reaction pH:** Approximately pH 6.0 (Range 5.0 - 7.0)
- **Reaction Temperature:** Room temperature
- **Peak Wavelengths:** 650 nm, unstopped, blue reaction product  
450 nm, stopped, yellow reaction product
- **Stopping Solution:** Equal volume of Stop Buffer. Stopped reactions show increased absorbance values of approximately 2-fold over unstopped reactions.
- **Reaction Stability:** Stopped reactions are stable for at least 30 minutes to several hours depending on the level of peroxidase activity. Intense reactions may precipitate on prolonged standing. This can be prevented by increasing concentration of stopping solution.

**Form** 3,3',5,5'-tetramethylbenzidine

**Contents** TMB in a dilute organic solvent with buffer, pH 6.0+ 0.5. Hydrogen peroxide is added at a concentration of 0.03%

**Stability** Reagents are stable for a least 12 months when stored at room temperature, or 18 months when stored at 2 - 8 C. Avoid contamination of reagents with labware which has not been thoroughly cleaned. A slight yellow tinge may develop over time. This does not affect product performance. Do not use if solution darkens.

**Storage** Store TMB solution at 2 - 8°C. Storage below this temperature may result in a slight blue tint, which disappears after returning to the appropriate temperature. Refrigeration is not mandatory. Do not expose reagents to strong light. Keep bottle tightly capped.

**Precautions** Do not pipet reagents by mouth. Avoid contact with skin and eyes. In case of contact, flush with plenty of water. Dispose of reagents according to local regulations. If disposed of in the sink, flush with plenty of water.