
Ultra-Sensitive TMB Substrate Solution (Catalog# TBS5021)
A single Stabilized Component Ready-to-use for HRP-based Immunoassays

Description

Ultra-Sensitive TMB Substrate is a one bottle stabilized chromogenic substrate for use with horseradish peroxidase (HRP) immunoassays. It contains both 3,3',5,5'-tetramethylbenzidine (TMB) and hydrogen peroxide (H₂O₂) in a one bottle format with long term stability and high sensitivity. It develops a deep blue color in the presence of HRP. The color intensity is proportional to the amount of HRP activity, which in turn is related to the levels of target analyte in an optimized ELISA, Western blotting and immunohistochemistry procedure. Addition of sulfuric acid stop solution (TBS5030) changes the color to yellow, enabling accurate measurement of the intensity at 450 nm using a spectrophotometer or plate reader. This formulation is used in most of the Tribioscience ELISA Kits where it provides consistent performance for the ELISA technique. It is ready-to-use formulation with NO DMF or DMSO.

Sensitivity: It is a highly sensitive substrate with the advantage of containing no DMF or DMSO and has very low background.

Stability and Storage: It is highly stable for a minimum of 36 months when stored at 4°C.

Package Size

TBS5021-100ML: 1x 100 mL

TBS5021-1L: 1x 1000 mL

Recommended Procedures

The Substrate is a ready-to-use substrate. No mixing or additional reagents are required. This product does NOT need to be warmed to room temperature before use.

1. Thoroughly wash the microplate to remove all unbound enzyme conjugate.
2. Add the desired amount of Ultra-Sensitive Substrate to each assay well (100 µl -150 µl is recommended).
3. Incubate the microplate at room temperature. Color will begin to develop immediately. The solution will turn yellow.
4. Measure the absorbance in the assay wells using a microplate reader set at a wavelength of 450 nm within 30 minutes after the addition of the acid. If measuring the absorbance using a dual wavelength mode, then subtract the absorbance at 650 nm from the absorbance at 450 nm.

Relative Products

PBS-1x (catalog# TBS5003)

BSA Standard solution (catalog# TBS5002)

Protein Assay kit (catalog# TBS2005)

Cell Lysis Buffer(10x) (catalog# TBS5001)

Research use only