

## Ultra-Sensitive TMB Substrate Solution (Catalog# TBS5021, Store at 4°C)

A single Stabilized Component Ready-to-use for HRP-based Immunoassays with long-term shelf-life

Catalog	<b>Unit Size</b>
TBS5021-50ML	50 mL
TBS5021-100ML	100 mL
TBS5021-200ML	200 mL
TBS5021-500ML	500 mL
TBS5021-1L	1000mL

## **Description**

Ultra-Sensitive TMB Substrate is one bottle stabilized chromogenic substrate for horseradish peroxidase (HRP) immunoassays. 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. The 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 an extremely sensitive substrate with the advantage of containing no DMF or DMSO and has exceptionally low background. The Sensitivity is much better than other brands.

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

## **Recommended Procedures**

The Substrate is a ready-to-use substrate. No mixing or additional reagents are required. This product does 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  $\mu$ l -150  $\mu$ l is recommended).
- 3. Incubate the microplate at room temperature for a desired time (5-20min is recommended). A blue color will begin to develop. The blue color will turn to yellow after adding stop solution.
- 4. Measure the absorbance in the assay wells using a microplate reader set at a wavelength of 450 nm.
- 5. Read the OD value immediately after the addition of the acid.

## **Relative Products**

Cell Lysis Buffer(10x) (TBS5001)
BSA Standard solution (TBS5002)
PBS-1x (TBS5003)
Protein Assay kit (TBS2005)
TBST- ELISA Washing Buffer (TBS5008)
PBST-ELISA Washing Buffer (TBS5011)
ALP fluorescence substance system (TBS5025)
HRP-fluorescence substance system (TBS5026)
ELISA Blocking Buffer (TBS5028)
Stop Solution for TMB Substrate (TBS5030)
ELISA Assay (TBS5049)
ELISA Coating Buffer (TBS5057)
ELISA Coating Buffer (TBS5058)

For research use only.