

## Product Information

### 3,3',5,5'-Tetramethylbenzidine (TMB) Liquid

#### Substrate System

peroxidase substrate

Catalog Number **T8665**

Storage Temperature 2–8 °C

#### Product Description

3,3',5,5'-Tetramethylbenzidine (TMB) is a chromogenic substrate suitable for use in ELISA procedures, which utilize horseradish peroxidase conjugates.<sup>1-4</sup> This substrate produces a soluble end product that is blue in color and can be read spectrophotometrically at 370 or 655 nm. The reaction may be stopped with acid, resulting in a yellow solution that is read at 450 nm.

The 3,3',5,5'-Tetramethylbenzidine (TMB) Liquid Substrate System is a reagent that combines soluble TMB chromogen, buffer, and hydrogen peroxide in a convenient, ready-to-use, single solution system. This product has been cited in several references.<sup>5-10</sup> Custom packaging and bulk purchase information are available upon request.

#### Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

Store at 2–8 °C. Protect reagent from exposure to excess light and air by storing in the tightly sealed original container until immediately before use. Reseal container immediately after dispensing reagent. Particulates may form and precipitate over time. Such particulates do not adversely affect the product integrity or product suitability.

#### Procedure

1. Allow reagent to come to room temperature prior to dispensing.
2. Use 200 µL of TMB solution per each microwell. No additional dilution or ingredients are required.
3. Incubate at room temperature for 30 minutes to develop the blue end product that can be read at 370 nm or 655 nm.
4. Acidification with 100 µL of a 0.5 M H<sub>2</sub>SO<sub>4</sub> stopping solution, after the 30-minute incubation period, will produce a yellow color that can be read at 450 nm.

#### References

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