

## Product Information

# Stop Reagent for TMB Substrate

Solid, for ELISA, 650 nm

**S5689**

## Product Description

In ELISA experiments that use horseradish peroxidase (HRP) conjugates and the chromogenic substrate 3,3',5,5'-Tetramethylbenzidine (TMB), it is common practice to stop the reactions with dilute acid, such as HCl or H<sub>2</sub>SO<sub>4</sub>. This Stop Reagent for TMB Substrate product is designed to stop TMB reactions in ELISA analyses in microwell systems, without producing the spectral change from blue to yellow that results from standard acid quenching of these reactions.

This product is a proprietary, dry blend formulation that is used to stop one-component TMB Liquid Substrate Systems (T5569, T4319, T8665, T0440, and T4444) in the blue range of 620 nm to 650 nm. Several publications cite use of S5689 in their protocols.<sup>1,2</sup>

## Precautions and Disclaimer

This product is 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

Prior to hydration with water, this product is stable indefinitely. After hydration, the reagent is stable for a minimum of 2 years. Store at room temperature before and after reconstitution. Refrigerated temperatures will not harm the reagent.

## Preparation Instructions

Add 100 mL of distilled or deionized water. Allow approximately 5 minutes to dissolve.

## Procedure

Equal volumes of substrate and Stop Reagent solution should be used. Refer to the data sheets included with the respective TMB Liquid Substrate Systems for additional details.

## References

1. Khodaverdian, V. *et al.*, *Antimicrob. Agents Chemother.*, 57(8), 3645-3652 (2013).
2. Bryant, P. *et al.*, *Mol. Pharmaceutics*, 12(6), 1872-1879 (2015).

## Notice

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

The information in this document is subject to change without notice and should not be construed as a commitment by the manufacturing or selling entity, or an affiliate. We assume no responsibility for any errors that may appear in this document.

## Technical Assistance

Visit the tech service page at [SigmaAldrich.com/techservice](https://SigmaAldrich.com/techservice).

## Terms and Conditions of Sale

Warranty, use restrictions, and other conditions of sale may be found at [SigmaAldrich.com/terms](https://SigmaAldrich.com/terms).

## Contact Information

For the location of the office nearest you, go to [SigmaAldrich.com/offices](https://SigmaAldrich.com/offices).

The life science business of Merck operates as MilliporeSigma in the U.S. and Canada.

Merck and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.