**TMB ELISA Substrate (High Sensitivity) ab171523**

### Overview

**Product name**
TMB ELISA Substrate (High Sensitivity)

**Tested applications**

- **Suitable for:** ELISA
- **Unsuitable for:** IHC-Fr or IHC-P

**General notes**

Abcam’s TMB ELISA Substrate (High Sensitivity) detects horseradish peroxidase (HRP) activity and contains 3,3',5,5'-tetramethylbenzidine in a mildly acidic buffer. The substrate is supplied as a ready to use solution. Unreacted substrate should be colorless or very light yellow in appearance. When this substrate system is reacted with peroxidase, a soluble blue reaction product is obtained. The reaction can be stopped using appropriate stop solution, producing a soluble yellow or soluble blue reaction product, depending upon the stop reagent used, which is stable for at least 1 hour. ab171523 is not recommended for membrane or immunohistochemical applications that require a precipitating reaction product.

**Product Use:**

- ab171523 is supplied as a ready to use solution. The product should be allowed to equilibrate to room temperature (25°C) prior to use. For microwell applications, 100 µL of substrate solution is added to each well. A soluble blue reaction product develops which can be read at 370 nm or in a range of 620 nm to 650 nm. For best results, sample absorbance values should be monitored and read before absorbance values exceed 2.0 OD units. In endpoint assays, the substrate reaction can be stopped using equal volumes of 1 N HCl, 0.6 N sulfuric acid, or one of the stop solutions (ab171529 and ab171531). Addition of acid turns the blue color to yellow and stops the enzymatic reaction. In the case of the 650 nm Stop Solutions for TMB Substrate (ab171531), the blue color does not change. Since stopping the reaction increases sample absorbance values approximately three fold, unless using the 650 nm Stop Solutions for TMB Substrate (ab171531), sample OD values should be monitored and substrate reaction stopped when values reach approximately 0.7 OD units. After stopping with the 450 nm Stop Solutions for TMB Substrate (ab171529), a soluble yellow product develops which is read in the 450 nm range. Stopping with the 650 nm Stop Solutions for TMB Substrate (ab171531) produces a soluble blue product which is read in the 650 nm range. Dilution of the substrate is not recommended. To reduce the intensity of a reaction, it is recommended that the antibodies or conjugates be diluted.

**Storage Instructions:**

Product should be stored at 2-8°C. Exposure to direct sunlight and other UV sources should be avoided due to the light sensitive nature of the TMB molecule.
Storage instructions
Shipped at Room Temperature. Store at +4°C. Store In the Dark.

Storage buffer
Constituents: 0.05% TMB, 20% Proprietary component, 79% Water

Applications

Our Abpromise guarantee covers the use of ab171523 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<td>ELISA</td>
<td>1/1. 100 µL of substrate solution is added to each well.</td>
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Application notes
Is unsuitable for IHC-Fr or IHC-P.

Images

Rapid Detection
TMB ELISA Substrate (High Sensitive) (ab171523) has fast enzyme kinetics for rapid color formation and improved assay sensitivity and performance.

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