abcam

ab171523

TMB ELISA Substrate (High Sensitivity)

Abcam's TMB ELISA Substrate (High Sensitive) detects horseradish peroxidase (HRP) activity and contains 3,3',5,5'-tetramethylbenzidine in a mildly acidic buffer.

Key facts

Applications	ELISA
Concentration	100 mg/mL Batch dependent concentration
Form	Liquid
Storage buffer	pH: 3.5 - 3.9 Constituents: 79% Water, 0.1% Hydrogen peroxide, 0.05% 3,3',5,5'-Tetramethylbenzidine

Reactivity data

Application	ELISA
Reactivity	Reacts
Dilution info	1/1
Notes	100 µL of substrate solution is added to each well.

Application	IHC-P
Reactivity	No
Dilution info	-
Notes	-

Application	IHC-Fr
Reactivity	No
Dilution info	-
Notes	-

Storage

Shipped at conditions	Ambient - Can Ship with Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Notes

Abcam's TMB ELISA Substrate (High Sensitive) 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:

Exposure to direct sunlight and other UV sources should be avoided due to the light sensitive nature of the TMB molecule.

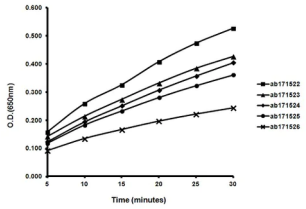
Product promise

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

2 product images



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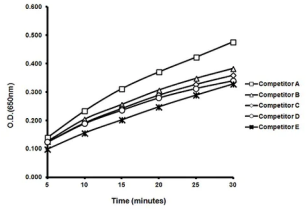
Rapid Detection
TMB ELISA Substrate (High Sensitive) (ab171523) has fast enzyme kinetics for rapid color formation and improved assay sensitivity and performance.



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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.