

# 1-Step™ Ultra TMB-ELISA

34028 34029

1313.3

Number	Description
34028	1-Step Ultra TMB-ELISA, 250mL
34029	1-Step Ultra TMB-ELISA, 1L

**Storage:** Upon receipt store product at 4°C. Product is shipped at ambient temperature.

## Introduction

The Thermo Scientific 1-Step Ultra TMB-ELISA contains soluble TMB (3,3',5,5'-tetramethylbenzidine) that is ideal for sensitive ELISA-based applications. TMB is a chromogenic substrate for horseradish peroxidase. Once oxidized by the enzyme, this substrate yields a blue product that absorbs at 370nm and 652nm. Adding sulfuric or phosphoric acid to stop the reaction changes the product to yellow that absorbs at 450nm and provides greater sensitivity than the blue product. The 1-Step Ultra TMB-ELISA is supplied ready to use with no mixing required.

## Procedure for using TMB

1. Equilibrate the TMB to room temperature. Add 50-100µL of the TMB Substrate Solution to each microplate well.
2. Incubate plate at room temperature for 15-30 minutes or until the desired color develops.
3. Stop reaction by adding 50-100µL of 2M sulfuric acid to each well.
4. Measure the absorbance of each well at 450nm.

## Troubleshooting

Problem	Possible Cause	Solution
Some wells are blue while others are blue/green	Common TMB appearance	Reduce the HRP concentration, use a less sensitive substrate or reduce incubation time
A precipitate forms in the wells	The HRP concentration is too high, or incubation time is too long	
High background		

## Related Thermo Scientific Products

15075	Reagent Reservoirs, 200/pkg.
15082	Microtube Racked System, 960 tubes
15036	Sealing Tape for 96-Well Plates, 100/pkg.
21130	Pierce High Sensitivity Streptavidin-HRP, 0.5mL
31030	Pierce High Sensitivity NeutrAvidin-HRP, 0.5mL
21124	Streptavidin, Horseradish Peroxidase Conjugated, 2mg
31001	NeutrAvidin® Protein, Horseradish Peroxidase Conjugated, 2mg
37538	StartingBlock™ (PBS) Blocking Buffer, 1L
37542	StartingBlock (TBS) Blocking Buffer, 1L

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