

# ReadiUse™ TMB Substrate Solution \*Optimized for **ELISA Assays with HRP Conjugates\***

Catalog number: 11003, 11012 Unit size: 1 L, 100 ml

| Component                                   | Storage  | Amount (Cat No. 11003) | Amount (Cat No. 11012) |
|---|--|------------------------|------------------------|
| ReadiUse™ TMB Substrate Solution *Optimized | Refrigerated (2-8 °C), Minimize light exposure | 1 bottle (1 L)         | 1 bottle (100 mL)      |
| for ELISA Assays with HRP Conjugates*       |  |                        |                        |

#### **OVERVIEW**

Horseradish peroxidase (HRP) and HRP conjugates facilitate the ABTS oxidation in the presence of hydrogen peroxide, turning ABTS into its blue-green oxidized product. ReadiUse  $^{\rm TM}$  TMB Substrate Solution is a premixed solution of TMB substrate with hydrogen peroxide. It produces a blue product upon interaction with HRP or HRP conjugates without the addition of hydrogen peroxide. The soluble blue product can be quantitated at 650 nm. Use of a stop solution enhances sensitivity 2-4 fold and the resulting yellow solution can be read at 450 nm. ReadiUse™ TMB Substrate Solution provides an convenient and ultrasensitive quantitative substrate system.

#### AT A GLANCE

#### Important

Warm ReadiUse™ TMB Solution to room temperature before use.

Note The reagent is to be used as supplied, no dilution is required.

#### **KEY PARAMETERS**

#### Absorbance microplate reader

650 nm Absorbance Recommended plate Clear bottom

### SAMPLE EXPERIMENTAL PROTOCOL

- Wash the assay plate following the incubation of HRP-labeled reagent.
- Add 100 µL of ReadiUse™ TMB Solution into each well.
- 3. Incubate the plate at room temperature for 15 - 30 min or until the desired color develops. Note: The incubation time varies depending on the assay conditions.
- Measure the absorbance signal at 650 nm with an ELISA microplate reader. Note: If desired, the reaction can be stopped by adding an equal volume of 2M sulfuric acid to each well. Stopped reaction should be read at 450 nm.

## **EXAMPLE DATA ANALYSIS AND FIGURES**

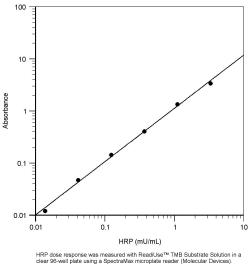


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Figure 1. HRP dose response was measured with ReadiUse™ TMB Substrate Solution in a clear 96-well plate using a SpectraMax microplate reader (Molecular Devices).

## **DISCLAIMER**

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