

ReadiUse™ ABTS Substrate Solution *Optimized for ELISA Assays with HRP Conjugates*

Catalog number: 11001 Unit size: 1 L

Component	Storage	Amount
ReadiUse™ ABTS Substrate Solution *Optimized for ELISA Assays with HRP Conjugates*	Refrigerate (2-4 °C), Minimize light exposure	1L

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. This chromogenic reaction is widely used for quantify HRP in ELISA assays. The oxidized ABTS product has the absorption maximum of 420 nm that can easily be followed with a spectrophotometer. ReadiUse™ ABTS Solution is optimized for ELISA assays that use HRP or HRP-labeled conjugates and hydrogen peroxide in microwell plates or test tubes. Our ABTS solution allows HRP reaction done in a single addition. The assay solution changes its color to light green upon its reaction with HRP or HRP conjugates in the presence of hydrogen peroxide.

AT A GLANCE

Important Warm ReadiUse™ ABTS Solution to room temperature before use. The reagent is to be used as supplied, no dilution is required.

KEY PARAMETERS

Instrument: Absorbance microplate reader

Absorbance: 420 nm Recommended plate: Solid white

SAMPLE EXPERIMENTAL PROTOCOL

 ${\bf 1.} \ \ {\bf Wash\ the\ assay\ plate\ following\ the\ incubation\ of\ HRP-labeled\ reagent.}$

2. Add 100 µL of ReadiUse™ ABTS Solution into each well.

3. Incubate the plate at room temperature for $15-30\ min.$

Note The incubation time varies depending on the assay conditions.

4. Measure the absorbance signal at 415 \pm 10 nm (maximum at 420 nm) with an ELISA microplate reader.

Note If desired, the reaction can be stopped by adding an equal volume of 1% SDS or 0.01% sodium azide into 0.1 M citric acid. Stopped reaction should be read within 30 minutes.

EXAMPLE DATA ANALYSIS AND FIGURES

Figure 1. Chemical structure for ReadiUse™ ABTS Substrate Solution *Optimized for ELISA Assays with HRP Conjugates*

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