ReadiUseTM ABTS Solution *Optimized for ELISA Assays with HRP Conjugates*

Ordering Information:	Storage Conditions:	Instrument Platform:
Product Number: 11001 (1 L)	Keep at 2 – 8 °C Avoid exposure to light	Colorimetric microplate readers

Introduction

ReadiUse™ ABTS Solution is optimized for ELISA assays that use horseradish peroxidase (HRP)-labeled conjugates and hydrogen peroxide in microwell plates or test tubes. Our ABTS solution allows the following HRP reaction kinetics to be readily followed.

$$ABTS + H_2O_2 \xrightarrow{HRP} ABTS^+ + H_2O$$

$$(\lambda_{max} = 405 \text{ nm}) \qquad (\lambda_{max} = 420 \text{ nm})$$

HRP and HRP conjugates facilitate the above reaction in the presence of hydrogen peroxide, turning ABTS into its blue-green oxidized product. The oxidized ABTS product has the absorption maximum of 420 nm that can easily be followed with a spectrophotometer. The assay solution changes its color to light green upon its reaction with HRP or HRP conjugates in the presence of hydrogen peroxide. Our ReadiUseTM ABTS Solution demonstrates high sensitivity and low background. It is safe, stable, and extremely convenient for both endpoint and kinetic assays.

ELISA Assay Protocol for one 96-well plate

- 1. Warm ReadiUse[™] ABTS Solution to room temperature before use. *Note: The reagent is to be used as supplied, no dilution is required.*
- 2. Wash the assay plate following the incubation of HRP-labeled reagent.
- 3. Add 100 μL of ReadiUseTM ABTS Solution into each well.
- 4. Incubate the plate at room temperature for 15 30 min. *Note: The incubation time varies depending on the assay conditions.*
- 5. Measure the absorbance signal at 415±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.

Disclaimer: This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact our technical service representative for more information.