

## Amplite™ Blue

Catalog number: 11005

Unit size: 25 mg

Component	Storage	Amount
Amplite™ Blue	Freeze (<-15 °C), Minimize light exposure	25 mg

### OVERVIEW

A variety of substrates are available for detecting peroxidase activity in ELISA assays. Colorimetric HRP substrates (e.g., TMB, OPD and ABTS) have been widely used for years. Each of these substrates varies greatly with respect to its performance characteristics such as detection sensitivity, working range and attainable signal-to-noise ratios. Our Amplite™ Blue peroxidase substrate is a soluble fluorogenic substrate for detection of peroxidase activity. Amplite™ Blue allows rapid HRP detection assays to be performed with greater sensitivity than the colorimetric HRP substrates (such as TMB and OPD). The fluorescent product of Amplite™ Blue does not photobleach. Amplite™ Blue exhibits a flat baseline in assays, which facilitates low-level detection sensitivity and allows for high signal-to-noise ratios.

### AT A GLANCE

**Important** It is important to store at <-15 °C and should be stored in cool, dark place.

It can be used within 12 months from the date of receipt.

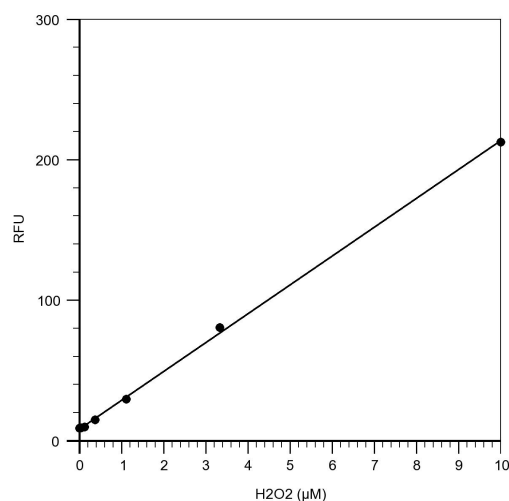
### KEY PARAMETERS

Instrument:	Fluorescence microplate reader
Excitation:	324 nm
Emission:	409 nm
Cutoff:	350 nm
Recommended plate:	Solid black

### EXAMPLE DATA ANALYSIS AND FIGURES

The reading (RFU) obtained from the blank standard well is used as a negative control. Subtract this value from the other standards' readings to obtain the baseline corrected values. Then, plot the standards' readings to obtain a standard curve and equation. This equation can be used to calculate H<sub>2</sub>O<sub>2</sub> samples. We recommend using the Online Linear Regression Calculator which can be found at:

<https://www.aatbio.com/tools/linear-logarithmic-semi-log-regression-online-calculator>



**Figure 1.** Hydrogen peroxide dose response was measured with Amplite™ Blue using a Gemini fluorescence microplate reader (Molecular Devices).

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