

## Product Information Sheet

### Ordering Information

Product Number:	11005
Product Name:	Amplite™ Blue
Unit Size:	25 mg
Storage Conditions:	<-15 °C and kept from light and moisture
Expiration Date:	12 months upon receiving

### Chemical, Physical and Spectral Properties

Molecular Weight:	~ 300
Appearance:	Off White Solid
Soluble in:	DMSO
Excitation Wavelength:	324 nm
Emission Wavelength:	409 nm

### Application Notes

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. Because H<sub>2</sub>O<sub>2</sub> is produced in many enzymatic redox reactions, Amplite™ Blue can be used in coupled enzymatic reactions to detect the activity of many oxidases and/or related enzymes/substrates or cofactors such as glucose, acetylcholine and cholesterol, L-glutamate, amino acids, etc. Simply make a 10-20 mM DMSO stock solution, and then diluted into assay buffer such as PBS, Tris buffer at 100-200 uM for assays.