

**PRODUCT ANALYSIS SHEET**

<b>Catalog Number:</b>	SB02
<b>Lot Number:</b>	See product label
<b>Volume:</b>	1 Liter
<b>Product Description:</b>	SB02, TMB Stabilized Chromogen, is a one-component horseradish peroxidase substrate containing 3,3',5,5"-tetramethylbenzidine plus H <sub>2</sub> O <sub>2</sub> in a mildly acidic buffer. This solution is ready for use. Dilution of this product prior to use is not recommended.
<b>Applications:</b>	This solution is intended for use in enzyme assays which employ horseradish peroxidase. It may be used in assays in which optical density is monitored over several time points (kinetic assays) and in endpoint assays. It is suitable for use in microwell assays, such as ELISA.
<b>Directions for Use:</b>	The solution should be colorless or very light yellow prior to use. In preparation for use of this product, the volume required should be decanted from the bottle into a clean dispensing trough. This step is necessary to prevent contamination of the contents of the bottle. The decanted volume should be allowed to warm to room temperature (22°C) prior to use. In microwell assays, pipette 100 µL of the warmed solution into each well. In the presence of peroxidase, the solution develops a blue reaction product. When color formation is monitored over several time points (kinetic assays), the optical density of the solution is measured at two wavelengths: 370 nm and 620-650 nm. When color formation is monitored at an endpoint, an equal volume of an acidic stop solution, such as 1 N HCl or BioSource International, Inc. Stop Solution, catalog number SS01, is added to the wells and allowed to mix with the solution in the wells. Addition of the stop solution results in the rapid formation of a yellow end product. The optical density of this yellow end product is measured at 450 nm. The yellow end product is stable for sixty minutes after addition of stop solution; therefore, the optical density should be measured within that time.
<b>Storage:</b>	Store at 2-8°C. Protect from light and from exposure to metal ions. It is highly recommended that the volume required for each assay be carefully decanted into a clean dispensing trough, and warmed to room temperature (22°C) prior to use. The unused solution remaining in the trough should be discarded.
<b>Expiration Date:</b>	Expires one year from date of receipt when stored as instructed.
<b>References:</b>	<p>Kilpadi, K.L., P.-L. Ching, and S.L. Bellis (2001) Hydroxylapatite binds more serum proteins, purified integrins, and osteoblast precursor cells than titanium or steel. <i>J. Biomed. Mater. Res.</i> 57:258-267.</p> <p>Semel, A.C., E.C. Seales, A. Singhal, E.A. Eklund, K.J. Colley, and S.L. Bellis (2002) Hyposialylation of integrins stimulates the activity of myeloid fibronectin receptors. <i>J. Biol. Chem.</i> 277(36):32830-32836.</p>

**This product is for research use only. Not for use in diagnostic procedures.**

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