



SureBlue™

SureBlue™ TMB 1-Component Microwell Peroxidase Substrate

Not all TMB substrates are equal - only one comes with over 20 years of experience. SureBlue TMB is the product of our long-standing expertise in the development of stable liquid substrates. As a single, ready-to-use reagent, it offers not only convenience but reliable performance in ELISA applications.

SureBlue contains 3,3',5,5' - tetramethylbenzidine in an acidic buffer and develops a deep blue soluble product when reacted with horseradish peroxidase labeled conjugates in microwell plates or tubes. KPL's SureBlue offers the following benefits:

Lot-to-lot consistency

KPL's commitment to the strictest quality control standards is realized in the consistency of SureBlue. Lot-to-lot variations do

not exceed 15%. SureBlue provides consistent performance everytime with little need for assay re-optimization between lots.

Stability / Long Shelf-life

SureBlue is a highly stable formulation. SureBlue exhibits high activity and low background for at least 24 months from date of manufacture. KPL's maximum acceptable background is 0.03 O.D. at 650 nm.

Flexibility

When the SureBlue reaction is stopped by acidification, it remains stopped for 60 minutes. Therefore, there is no need to read the plate immediately. SureBlue provides the flexibility to schedule plate measurements at your convenience.

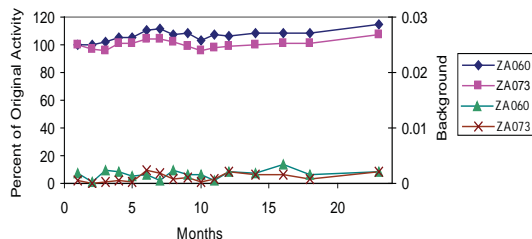
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LIFE SCIENCES

 **KPL** Power Your
Immunoassays

Long Term Stability

Substrate activity and background levels were measured for two lots of SureBlue stored at 2-8°C over a 24 month period. Activity was measured by reacting the substrate with serial dilutions of HRP conjugate from 10ng/mL to 0.2 ng/mL. After development, the substrate was stopped and the O.D. measured at 450 nm and compared to the original activity as measured at one month. The substrate's activity over 24 months compared to its original activity is represented on the primary axis. Background was measured by O.D. of unreacted substrate at 650 nm and is represented on the secondary axis. Results indicate that SureBlue is extremely stable over a 24 month period with no significant loss of activity or increase in background when stored at 2-8°C. (Figure 1).

Figure 1.

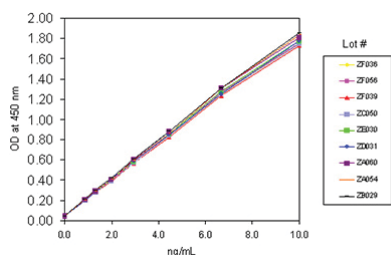


Lot-to-Lot Consistency

Our experience allows us to produce the same high-performance substrate lot after lot.

For each of nine lots of SureBlue, triplicate samples of HRP anti-human IgG were tested at concentrations ranging from 20-400 pg/well. The reaction was stopped with acid, and the average optical density of the triplicate samples was reported as shown below.

Figure 2.



Conclusion: The variation in activity among each lot of KPL's SureBlue was less than 15%.

Ordering Information

Catalog No.	Description	Size
52-00-01	SureBlue TMB Microwell Substrate (1-Comp)	100 mL
52-00-02	SureBlue TMB Microwell Substrate (1-Comp)	4 x 100 mL
52-00-03	SureBlue TMB Microwell Substrate (1-Comp)	1000 mL

To order or for more information on KPL's full line of protein and nucleic acid detection products, contact us at 800.638.3167 / 301.948.7755, FAX 301.948.0169 or visit us at www.kpl.com.

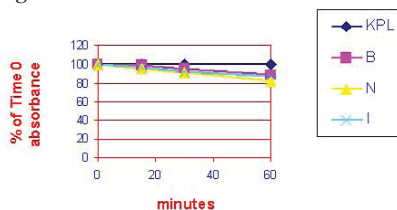
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Stable Stopped Reaction

Once SureBlue is stopped, it stays stopped. This feature provides flexibility in plate measurement of manual assays, and makes it the ideal choice for automation.

Average optical density of stopped triplicate samples (500 pg/well HRP anti-human IgG) were taken at various time points for SureBlue and competitor TMB (see Figure 3). The optical density of each test sample was normalized to its time zero reading.

Figure 3.



Conclusion: Results demonstrate that stopped SureBlue is the most stable stopped TMB substrates employed in this study.

SureBlue™

Related Products

TMB Stop Solution
Catalog No. 50-85-05
Size: 400 mL

HRPStabilizer
Catalog No. 54-15-01
Size: 200 mL

10% BSA Diluent/Blocking
Solution Concentrate
Catalog No. 50-61-00
Size: 200 mL

Coating Solution Concentrate
Catalog No. 50-84-00
Size: 50 mL

Wash Solution Concentrate
Catalog No. 50-63-00
Size: 800 mL



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