

Data Sheet for SeraBlue® pure substrates

SeraBlue® pure products are ready-to-use substrates suitable for HRP-based conjugates in ELISA applications and free of organic solvents.

1 Products

Product Name	Article Number	Specifications, Recommendations for Use	Activity
SeraBlue® pure 100	S-600-TMB	<ul style="list-style-type: none"> High activity Incubation time up to 20 min Incubation temperature 20...37 °C 	high
SeraBlue® pure 50	S-650-TMB	<ul style="list-style-type: none"> Activity ~60% of SeraBlue® pure 100 Incubation time up to 45 min Incubation temperature 20...37 °C 	low

General Features

- free of organic solvents
- shelf life 36 months from date of manufacture
- store at 2...8 °C

2 Effective Components and Functional Principle

SeraBlue® pure substrates contain <0.1% 3,3',5,5'-tetramethylbenzidine (TMB) as chromogen and <0.05% hydrogen peroxide (H₂O₂) as oxidizing agent. All substrates are based on a suitable buffer system with an acidic pH range.

In the presence of horseradish peroxidase (HRP) oxidation of TMB leads to a color change from colorless to blue. This reaction can be monitored photometrically over time at a wavelength of 650 nm. The reaction can be terminated by adding stop solution (e.g. diluted sulfuric acid) leading to further oxidation of TMB and a color change of the solution from blue to yellow. The final oxidation product can be measured at 450 nm.

3 General Instructions for Use

When handling SeraBlue® pure substrates adhere to principals of good laboratory practice.

The SeraBlue® pure substrates should be stored protected from light at 2...8 °C in tightly closed containers. Long-term storage in frozen conditions is not recommended.

Mix or shake the solutions before use. It is recommended to work in a low-dust, darkened environment and to wear powder-free gloves when filling substrates. Contact of the substrates with metal parts should be avoided. In case of further storage after filling, usage of light-impermeable bottles made of HDPE or PE is recommended.

When using 96-well microtiter plates, addition of 100 µL SeraBlue® pure substrate per well is recommended. After incubation (protected from light) the reaction may be stopped, and the photometric measurement can be carried out. Incubation time and temperature must be optimized for each assay individually. For recommendations see section 1. The unstopped solution should be measured at 650 nm (background correction: 492 nm). The stopped solution should be measured at 450 nm (background correction: 620 nm). Measurement should take place within 30 min after the addition of stop solution.

All specifications and details given are based on internal studies. Use in other applications is subject to individual evaluation.

4 Related Products

Further Seramun products include stabilization solutions, blocking and wash buffers, as well as additional substrates. Detailed information is available on our website: www.seramun.com

Explanations to possibly given pictograms:



Manufacturer



Date of manufacture



Use-by date



Batch code



Article number



Keep away from sunlight



Temperature limit



Consult instructions for use

UFI

Unique formula identifier

**For further product information, please refer to Safety Data Sheet or
contact pm@seramun.com**