Data Sheet for SeramunBlau® ELISA Substrates

1 Products

Features that apply to all SeramunBlau® ELISA substrates:

- Suitable for HRP-based conjugates
- Ready to use
- Shelf life 36 months from date of manufacture
- Store at 2…8 °C

Product Name	Article Number	Specifications, Recommendations for Use	Activity
SeramunBlau® fast2	S-100-TMB	• Highest activity • Incubation time up to 20 min • Incubation temperature 20…37 °C	high
SeramunBlau® automat fast	S-028-TMB	• Activity ~90% compared to SeramunBlau® fast2 • Incubation time up to 20 min • Incubation temperature 20…25 °C • Adapted for automatic processing, high tolerance against wash buffer residues	
SeramunBlau® slow2 85	S-185-TMB	• Activity ~85% compared to SeramunBlau® fast2 • Incubation time up to 30 min • Incubation temperature 20…37 °C	
SeramunBlau® slow2 70	S-170-TMB	• Activity ~70% compared to SeramunBlau® fast2 • Incubation time up to 30 min • Incubation temperature 20…37 °C	
SeramunBlau® slow2 50	S-150-TMB	• Activity ~50% compared to SeramunBlau® fast2 • Incubation time up to 45 min • Incubation temperature 20…37 °C	low

2 Effective Components and Functional Principle

SeramunBlau® ELISA substrates contain <0.1% 3,3‘,5,5‘-tetramethylbenzidine (TMB) as chromogen and <0.05% hydrogen peroxide (H_2O_2) as substrate. 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 color reaction is completed immediately after the addition of the stop solution and the final oxidation product can be measured at 450 nm.

3 Information on Storage, Shipping and Filling

Storage:

- Store SeramunBlau® ELISA substrates tightly closed at 2…8 °C protected from light.
- During storage, a color shift to pale blue or pale yellow might occur (color depends on the specific formulation). The color shift does not affect the performance of the substrate.

Shipping:

- In stability studies it could be shown that shipping at ambient temperature does not affect the performance of the substrates.

Filling:

- Work in a low-dust and darkened room.
- Avoid contact of the substrates with metal components.
- Clean all instruments and vessels thoroughly before use.
- Wear powder-free gloves during filling.
- The use of HDPE or PE bottles that are impermeable to light is recommended.

4 General Instructions for Use

SeramunBlau® ELISA substrates are supplied as ready to use solutions. Products may only be used by qualified staff.

When using 96-well microtiter plates, addition of 100 µL SeramunBlau® ELISA 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 individually for each assay. 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.

High HRP amounts (>0.3 ng/well) may lead to the formation of crystals, and subsequently to incorrect read-outs.

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

5 Disposal

Disposal of remains and packaging must comply with national and local regulations.

Please see the Safety Data Sheets for further product information.

For related products please see our website at www.seramun.com