

Data Sheet for SeramunGelb® ELISA-Substrate

1 Products

Product name	Product code	Specifications, recommendations for use
SeramunGelb® fast	S-005-#-pNPP	<ul style="list-style-type: none"> • Activity: high • Incubation time: short* • Incubation temperature: 20...37 °C or 68...100 °F
SeramunGelb® medium	S-016-#-pNPP	<ul style="list-style-type: none"> • Activity: ~90% compared to SeramunGelb® fast • Incubation time: moderate* • Incubation temperature: 20...37 °C or 68...100 °F
SeramunGelb® slow	S-006-#-pNPP	<ul style="list-style-type: none"> • Activity: ~70% compared to SeramunGelb® fast • Incubation time: long* • Incubation temperature: 20...37 °C or 68...100 °F
SeramunGelb® extraslow	S-026-#-pNPP	<ul style="list-style-type: none"> • Activity: between SeramunGelb® medium and SeramunGelb® slow • Incubation time: long* • Incubation temperature: 20...37 °C or 68...100 °F

* Incubation times are dependent on enzyme concentrations and incubation temperatures. The indications are values for orientation: short: up to 20 min, moderate: up to 30 min; long: up to 45 min.

The hash mark # is a spacer for different filling volumes.

2 Effective components and principle of function

In different buffer solutions (pH = 9.5), with different supplementation if required, the effective component para nitrophenyl phosphate (pNPP) is dissolved.

More information can be found in the safety data sheets.

Alkaline Phosphatase transfers the phosphate residue to an acceptor. Under alkaline conditions a yellow colour occurs, resulting from the formed nitrophenol.

3 Information on storage, transport and filling

SeramunGelb® ELISA-Substrate solutions are to be stored at 2...8°C protected from light. Under these conditions a shelf life printed at the label is valid for the unopened bottle.

Spontaneous decay will increase the background. If stored at room temperature, the velocity of the decay will increase. Thus, both storage and transport at room temperature should be avoided. Nevertheless, the activity of the solution is not affected by storage at room temperature. The solution still works beyond the expiry date, but some applications, especially those including visual evaluation, may be hampered by increased background.

Contaminated or leaked out substrate solution from damaged bottles should not be used anymore and has to be destroyed.

Use isolated containers with some cool bags for transport.

Following instructions for bottling should be considered:

- Work in a dust free and darkened room.
- Keep the solution as cool as possible.
- Avoid contact of the solutions with any metal parts.

- Clean all instruments and vessels very extensively.
- Wear powder-free gloves during bottling.
- Close the bottles immediately to minimize the influence of light and dust.
- Use clean bottles that are impermeable to light made from HDPE or PP.

4 General instructions for use in ELISA

Only qualified laboratory staff, who are familiar with the basics of immunological methods, are allowed to use these solutions.

The substrate solutions can be used in qualitative and quantitative ELISA procedures.

When using 96-well microtiter plates, adding 100 µL of SeramunGelb® substrate per well after incubation and washing is recommended. After substrate incubation the reaction can be stopped and the photometric measurement can be carried out. Using higher incubation temperatures (37° C) may shorten the incubation time.

The reaction can be stopped by using the special developed solution SeramunGelb® stop or SeramunGelb® stop2. The use of other commercially available stop solutions cannot safely exclude a further increase of the signal. Addition of a stopping solution does not change the general shape of the spectrum.

The unstopped and the stopped solution should be measured at 405 nm and the background correction: should be measured at 620 nm.

5 Removal

The disposal of remains must be conform with the national and local legal requirements. Empty bottles can be used for local recycling or given to garbage disposals.