

## 1. Effective Components

SeramunBlock NP 5x conc. is a concentrated solution for the preparation of protein free stabilizer for solid surfaces.

The phosphate buffered solution contains surface active agents as blocking reagent and further protein stabilizing substances.

To safe the solution from microbiological spoilage azide is added. This is dangerous for water organisms and may form explosives in connection with heavy metal ions (see safety data sheet). By use in accordance with attended purpose, no danger for laboratory staff and environment is expected.

## 2. Principle of Function

During the coating of micro titration plates or other plastic surfaces with reactive proteins for immunological reactions, parts of the surfaces may stay uncoated. Due to avoid non-specific reactions in the test system, these parts will be blocked with surface active agents, which are contained in SeramunBlock NP in high excess. The selected surface active agents ensure the coverage by electrostatic interaction as well as hydrophilic and hydrophobic interaction.

During the storage of dried coated micro titration plates or other plastic surfaces a loss of function from reactive proteins may occur. That is why protein stabilizing substances in SeramunBlock NP stabilize the protein structure and generate micro hydration.

## 3. Instruction for Storage, Transport and Filling

SeramunBlock NP 5x conc. has to be stored at 2 – 8 °C in tightly closed vessels. In the unopened original package the shelf life is 36 months from the date of production.

It is possible to transport the solution at ambient temperature, unless it does not exceed 30 °C. The transport should take less than one week.

The preparation of the ready to use solution as well as any further handling to fill in other vessels or splitting has to be done under sterile conditions.

Solutions showing turbidity should not be used. Since this might be a sign of microbial contamination.

## 4. General Instructions for the Use

Only qualified staff, who is familiar with the production of immunological tests, is permitted to handle SeramunBlock NP 5x conc..

The ready to use solution is prepared by diluting the concentrate 1:5 (e.g. 1000 ml concentrate + 4000 ml water) with deionized water (conductivity < 0.060 µS). For larger volumes it is advantageous measure by weight, use a density of 1.123 g/ml for the concentrate for calculation (for the example above 1123.0 g concentrate and 3988.2 g water). Stir the mixture well before use, the high differences in density restrain a spontaneous mixing.

The used volume of blocking solution should exceed the volume of the coating solution and exceed the maximum filling volume the intended test volume.

Depending from the reactive protein aspirate after coating or wash once with PBS or blocking solution. E.g. wells of micro titration plates should be filled with 200 to 300 µl ready to use SeramunBlock NP and incubated for one hour at room temperature. The incubation time is very flexible and it is possible to adapt to technical requirements.

Aspirate SeramunBlock NP to finish blocking process. Optional wash once with deionized water. Dry the surfaces at a dust free place at room temperature or 37°C and seal airtight, in a pouch with addition of desiccant (silicagel).

## 5. Literature

A. M. Raem, P. Rauch: Immunoassays, Spektrum Akademischer Verlag 2007

## 6. Symbols used



In vitro diagnostic



Catalogue number



Batch code



Manufacturer



Consult instruction for use



Temperature limitation



Do not reuse



Use by