

1. Product Identifier

Product Name	Catalogue No.*: Set A+B	Part A	Part B
SeramunLux® active 100	S-500-#-LUMAB	S-501-#-LUMA	S-502-#-LUMB
SeramunLux® active 75	S-570-#-LUMAB	S-571-#-LUMA	S-572-#-LUMB
SeramunLux® active 50	S-550-#-LUMAB	S-551-#-LUMA	S-552-#-LUMB
SeramunLux® active 25	S-520-#-LUMAB	S-521-#-LUMA	S-522-#-LUMB

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

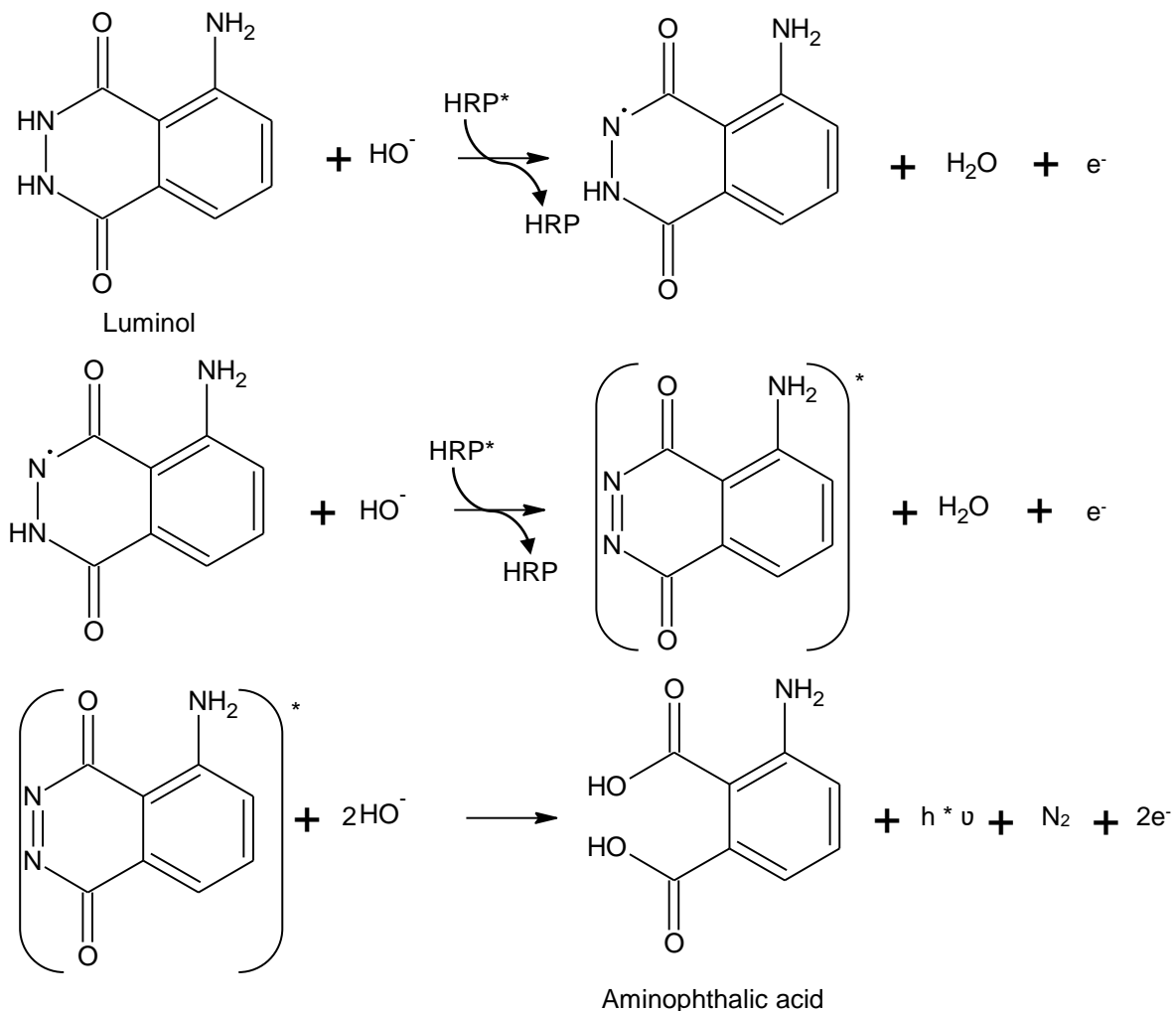
2. Effective Components


The component *Part A* contains luminol and appropriate enhancers in a TRIS buffer. The component *Part B* contains peroxide in an acetate buffer.

The working solution is prepared by mixing equal parts of both components. The pH value of the working solution is between 8.7 and 8.9. The working solution is usable for at least 48 hours at room temperature.

The concentrations of each chemicals are below hazardous levels (see safety data sheet).

3. Principle of Function



	Data Sheet for Substrate Solutions	Doc.: DB_E_LUMAB
	Name of the Product Group: SeramunLux® active Handling Instructions	version: 03 valid from: 2017-10-15 page: 2 of 2

Peroxidase (HRP) catalyses the decomposition of peroxide, taking electrons, resulting from a multi-stage reaction of the luminol. The enhancers are involved in the reaction process by transferring electrons and intensifying the light yield during the decay of the excited luminol intermediate.

4. Instruction for Storage, Transport and Bottling

The components *Part A* and *Part B* of SeramunLux® active should be stored at 2-8 °C protected from light. Under these conditions, a shelf life of 24 months is given for the unopened bottle.

The solution will still work beyond the expiry date, but a lower activity has to be taken into account.

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

The solutions are able to be transported at room temperature. Temperatures exceeding 30 °C have to be avoided. Shipping should be completed within one week.

For bottling, please consider the following instructions:

- Work in a dust free room, protected from direct sunlight.
- Pay attention, that the solutions have no contact with metal parts (leading to catalysis) of your instruments. Closed systems of silicon tubes are favoured. Use different tubes for each substrate component.
- Clean all instruments and vessels very carefully.
- Never touch parts of the instruments that are in contact with the one of the solutions with the naked hand. Wear powder free gloves.
- Close the bottles immediately to minimize the influence of light and dust.
- Use bottles made of HDPE or PP.

5. General Instructions for the Use

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

Preparation of the working solution: Mix equal volumes of both components *Part A* and *Part B*. The working solution is usable at least for 48 hours at room temperature.

Application in chemiluminescence immunoassay: Following to the HRP conjugate incubation step, the microtiter plate has to be washed efficiently and residual liquid has to be removed thoroughly. Then dispense at least 50 µl up to 200 µl of the working solution into each well to start the enzyme-substrate reaction. The measurement can start directly after substrate addition. Incubations times between 5 and 15 minutes are recommended. Exceeding 30 minutes between adding substrate solution and measurement should be avoided.











Application in Western blot: The well-blocked and washed membrane is to be covered with the working solution (approx. 100 µl/cm²) and to be shaken for about 2 minutes (20/min, horizontal shaker). The working solution is to be decanted and the wet membrane is wrapped into a foil. The picture can then taken immediately, preferably with a luminescence imager. As general rule some seconds will be sufficient, but the exposure time can be prolonged up to 60 minutes, if needed.

6. Literature

A. Navas Díaz et al.: Phenol Derivates as Enhancers and Inhibitors of Luminol-H₂O₂-Horseradish Peroxidase Chemiluminescence, J BIOLUMIN CHEMILUMIN 1998:13:75-84

L. J. Kricka: Clinical applications of chemiluminescence, Analytica Chimica Acta 500(2003)279-286

7. Symbols used

	Manufacturer		Consult instructions for use		Do not reuse
	<i>In vitro</i> Diagnostic Medical Device		CE Marking		Keep away from sunlight
	Catalogue Number		Temperature limitation		
	Batch Code		Use by		