

## Detection Systems

SERVALight HRP chemiluminescence substrates are a family of highly sensitive reagents for detection of membrane bound antigens (Western Blot), labelled directly with Horseradish Peroxidase (HRP) or indirectly with HRP-conjugated antibodies/streptavidin. They are easy to use, have an excellent stability of at least one year, and save money and precious antibodies due to high dilution of antibodies at a working concentration of 0.1 ml/cm<sup>2</sup> during the detection process. Most important, the signal duration is significantly extended compared to other commercially available systems.

SERVALight CL HRP substrates are available in **two formats**:

- **PreMixed** as One-Tube-Solution – ready to use with no need to mix two components with excellent signal duration between 2 and 4 h (see table below)
- **Two-component system** – up to sixfold extended signal duration from 8 h up to 24 h, working solution stable for at least three days


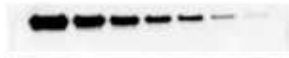
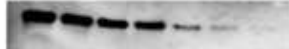
SERVALight CL HRP substrates are available in **five detection ranges** - fine tune your signal intensity adapted to your experimental needs!

- **Vega** for mid-picogram protein quantities/high abundance
- **Polaris** for low picogram protein quantities/high abundance
- **Eos** for mid-femtogram protein quantities/medium abundance
- **Eos Ultra** for Mid to low femtogram protein quantities/low abundance
- **Helios** for below femtogram protein quantities/very low abundance

SERVALight	Signal intensity	Signal duration	Primary Ab dilution	Secondary Ab dilution
PreMix Vega	Standard	3 h	1:100 – 1:5000	1:1000 – 1:20,000
Vega	Standard	Long	1:100 – 1:5000	1:1000 – 1:15,000
Polaris	Medium	8 h	1:1000 – 1:5000	1:20,000 – 1:100,000
PreMix Eos	High	4 h	1:1000 – 1:15,000	1:25,000 – 1:150,000
Eos	High	>24 h	1:1000 – 1:15,000	1:25,000 – 1:150,000
Eos Ultra	Very high	>24 h	1:5000 – 1:50,000	1:50,000 – 1:250,000
PreMix Helios	Extreme	2 h	1:5000 – 1:100,000	1:100,000 – 1:500,000
Helios	Extreme	11 h	1:5000 – 1:100,000	1:100,000 – 1:500,000

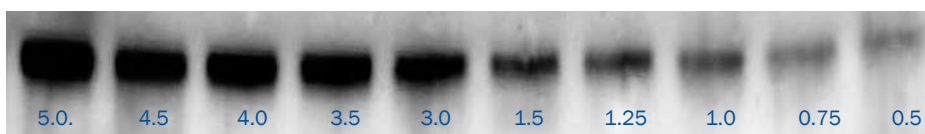
**SERVALight CL HRP Substrates:**

- Optimized for attaining low background and high signal to noise ratio
- Extended signal duration
- Excellent stability – at least one year stable when stored at room temperature
- Economical - save money and precious antibodies due to high dilution of antibodies

SERVALight	Primary Ab	Secondary Ab
 SERVALight PreMix Vega	1:2000	1:20,000
 SERVALight PreMix Eos	1:5000	1:75,000
 SERVALight PreMix Helios	1:10,000	1:100,000

- **Easy and safe to use, excellent stability and an extended signal duration for best results in chemiluminescence detection**

Product	Size	Cat. no.
SERVALight Vega CL HRP WB Substrate Kit	250 ml	42588.02
	500 ml	42588.03
	100 ml	42584.01
SERVALight Polaris CL HRP WB Substrate Kit	250 ml	42584.02
	500 ml	42584.03
	100 ml	42585.01
SERVALight Eos CL HRP WB Substrate Kit	50 ml	42585.01
	250 ml	42585.02
SERVALight EosUltra CL HRP WB Substrate Kit	20 ml	42586.01
	100 ml	42586.02
	20 ml	42587.01
SERVALight Helios CL HRP WB Substrate Kit	100 ml	42587.02
	200 ml	42587.03
	250 ml	42655.01
SERVALight PreMix Vega CL HRP WB Substrate	250 ml	42655.01
SERVALight PreMix Eos CL HRP WB Substrate	250 ml	42656.01
SERVALight PreMix Helios CL HRP WB Substrate	250 ml	42657.01



Human transferrin was diluted (5 to 0.5 ng) and electrophoresis was performed. The gel was transferred to PVDF membranes, blocked and incubated with 1:20,000 rabbit anti-transferrin. After washing, the membranes were incubated with 1:100,000 of HRP-conjugated goat anti-rabbit antibody. The membrane was washed again and then incubated with SERVALight EosUltra. Exposure time was 300 sec.

The SERVAColor blot solutions are ready-to-use and non-toxic. Outstanding features are rapid precipitate formation due to high activity, a very low background, long term stability at room temperature as well as no significant fading after reaction stop.

- **SERVAColor BCIP/NBT Blot Solution**
  - Highly sensitive substrate solution for detection of alkaline phosphatase (AP)
- **SERVAColor TMB Blot Solution**
  - Highly sensitive substrate solution for detection of horseradish peroxidase (HRP)
- Beside SERVALight and SERVAColor kits SERVA offers stand alone detection reagents like Luminol, TMB, BCIP and NBT

Product	Size	Cat. no.
SERVAColor BCIP/NBT Blot Solution	250 ml	15245.01
SERVAColor TMB Blot Solution	250 ml	37071.02
3,3',5,5'-Tetramethylbenzidine (TMB)	5 g	35926.02
	25 g	35926.03
Luminol	5 g	28085.01
5-Bromo-4-chloro-3-indolyl-phosphate • p-toluidine salt (BCIP)	100 mg	15247.02
	500 mg	15247.03
	250 mg	30550.01
Nitro Blue Tetrazolium Chloride (NBT)	1 g	30550.02
	5 g	30550.03
	5 g	33429.01
Ponceau S	25 g	33429.02
	500 ml	33427.01
Ponceau S Solution for Electrophoresis	500 ml	33427.01