

PRODUCT INFORMATION

SERVA Lightning Red for 1D SDS PAGE

Cat. No. 43401

Kit Components	43401.01	43401.02
SERVA Lightning Red	1 vial	1 vial
Dimethylformamide (DMF, water-free)	100 µl	250 µl
2x SERVA SDS Sample Buffer pH 8.3	25 ml	2x 25 ml
Reduction reagent is not included.		

Application Fluorescent dye for direct protein labeling prior to 1D gel electrophoresis, compatible with mass spectrometry and other downstream applications, e. g. Western blotting.
If necessary, gels can be post stained, e. g. with silver stain.

Storage Store powder dry and dark at +2 °C – +8 °C. If stored as recommended, at least usable until: see expiry date on label. Reconstituted dye (in water-free DMF) is stable for at least 6 months when stored in aliquots at -20 °C.

Detection Excitation: 530 nm; Emission: 610 nm when bound to protein

Labeling protocol:

Note: The sample buffer does not contain any reduction reagent. By adding 10 mM DTT or 5 % 2-mercaptoethanol (2-ME) you will receive a reducing sample buffer (concentrations refer to 1x sample buffer). Due to oxidization, the buffer should always be freshly prepared.

Sample Preparation

- Add 5 µl of a 2 M DTT (309 mg/ml) stock solution resp. 50 µl 2-ME to 500 µl 2x SERVA SDS Sample Buffer pH 8.3
- Mix the sample with an equal volume of the 2x reducing sample buffer pH 8.3
- Heat the sample for 5 min at 95 °C
- Recommended protein concentration: 1 – 10 mg/ml

Dye Solution Reconstitute the dye in 100 µl resp. 250 µl water-free DMF (kit-dependent), mix well and spin down before making aliquots.

Labeling Solution Prepare this solution always fresh immediately before labeling: Mix the dye solution 1:50 with 1x reducing sample buffer pH 8.3, e. g. add 49 µl sample buffer to 1µl dye solution.

Labeling

- Pipet 10 µl Labeling Solution into a vial and add 5 µg protein, e. g. 5 µl sample with protein concentration of 1 mg/ml or 0.5 µl sample with protein concentration of 10 mg/ml
- Mix gently and place vial at room temperature for 30 min.
- Mix gently and apply labeled protein sample on SDS PAGE gel, e. g. 5 µl per well.

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