

SERVA Stains for Nucleic Acids

Besides the classical stain for agarose gels ethidium bromide SERVA offers a safe, non-carcinogenic alternative: SERVA DNA Stain G, SERVA DNA Stain Clear G and SERVA HiSens Stain G. They are at least as sensitive as ethidium bromide and can be used in exactly the same way in agarose gel

electrophoresis.

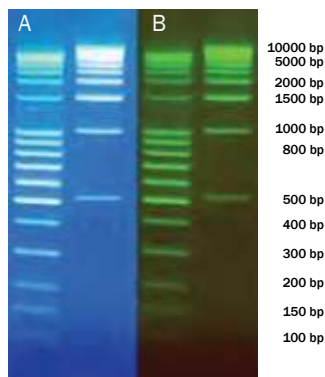
The dyes emit a green fluorescence when bound to DNA or RNA. The fluorescence emission is similar to EtBr at ca. 530 nm when bound to nucleic acid. Pre- and post-staining is possible. The post-staining solution is reusable 2 – 3 times.

SERVA DNA Stain G has one fluorescence excitation maximum at ca. 300 nm and another at ca. 450 nm when bound to nucleic acid. Working dilution is 1:20,000 to 1:50,000.

It has two secondary fluorescence excitation peaks (ca. 270 nm and 295 nm) and one strong excitation peak centered around 490 nm. Working dilution is 1:17,000 to 1:25,000.

SERVA DNA Stain Clear G gives a very low background and has therefore a higher sensitivity as SERVA DNA Stain G.

SERVA HiSens Stain G is the most sensitive dye and detects 0.1 ng of a 4 Kb dsDNA band.



DNA samples were separated in a 1.5 % agarose gel. For pre-staining SERVA DNA Stain Clear G was diluted 1:25,000. The staining was visualized using a transilluminator at 312 nm. Lane 1: SERVA DNA Standard 100 Bp ladder extended, cat. no. 39312. Lane 2: SERVA DNA Standard 1KBp DNA ladder, cat. no. 39314. Agarose SERVA for DNA Electrophoresis, cat. no. 11404; BlueMarine™ 100, cat. no. BM 100; 35 min, 150 V. A: without orange filter; B: with orange filter.

Product	Size	Cat. no.
Ethidium bromide aqueous solution, 1 % w/v	25 ml	21251.01
SERVA DNA Stain G	1 ml	39803.01
	5 x 1 ml	39803.02
SERVA DNA Stain Clear G	1 ml	39804.01
	5 x 1 ml	39804.02
SERVA HiSens Stain G	500 µl	39805.01