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## Non-carcinogenic alternative to Ethidium Bromide

SERVA DNA Stain G is a safer alternative to traditional ethidium bromide stain for detecting nucleic acid in agarose gels. It is at least as sensitive as ethidium bromide and can be used in exactly the same way in agarose gel electrophoresis. SERVA DNA Stain G can be added to the gel solution, working dilution is 1:20.000 to 1:50.000.

SERVA DNA Stain G emits green fluorescence when bound to DNA or RNA. It has one fluorescence excitation maximum at ca. 300 nm and another at ca. 450 nm when bound to nucleic acid. SERVA DNA Stain G allows visualization of DNA (>20 ng) in the agarose gel under visible light. This eliminates the need for exposure to UV light, which can nick and damage DNA.

SERVA DNA Stain G is non-carcinogenic and according to the AMES test it causes significantly fewer mutations than ethidium bromide.

## Comparison of SERVA DNA Stain G vs. EtBr

- Non-carcinogenic alternative to ethidium bromide (EtBr)
- At least as sensitive as EtBr
- Two excitation maxima: 300 nm and 450 nm
- Causes significantly fewer mutations than EtBr (AMES test)

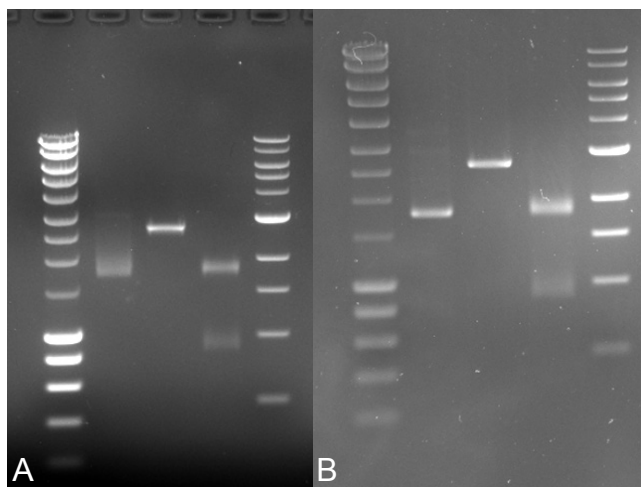
## Ordering information

Product	Quantity	Cat. No
SERVA DNA Stain G	1 mL	39803.01
	5 x 1 mL	39803.02

## SERVA DNA Stain G

Fluorescence stain for DNA and RNA in agarose gels

## Pre- and post-staining of DNA agarose gels by SERVA DNA Stain G



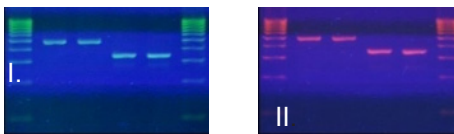
DNA samples (lane 1 & 5 DNA ladders, lane 2: 50 ng pUC19, lane 3: 50 ng pUC19x $Eco$ RI, lane 4: 50 ng pUC19x $Eco$ RI and  $Sca$ I) have been separated on a 1 % TAE agarose gel at 75 V for 1.5 h, gel staining was visualized using UV transilluminator at 254 nm.

(A) was pre-stained with 1:50,000 dilution of SERVA DNA Stain G

(B) was post-stained with 1:20,000 dilution of SERVA DNA Stain G.

(Data kindly provided by Neva Caliskan & Dr. Frank Peske, Max Planck Institute for Biophysical Chemistry, Göttingen / Germany)

## SERVA DNA Stain G stained DNA agarose gels versus EtBr stained gels



I: Agarose gel stained with SERVA DNA Stain G at 254 nm

II: Agarose gel stained with EtBr at 254 nm

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