Instructions for use

Roti®-Bleach

Silver Destaining Kit

Easy decolorising of overstained silver gels in foil-supported or free PAA gels. The new staining consistency is firmly preserved.

For film supported and conventional PAA gels
Sufficient for
10 gels with a maximum volume of 10 ml or
5 gels with a maximum volume of 40 ml

I.1 Technical information

- Please wear gloves.
- Use double distilled, deionized water.
- Please ensure that the temperature of the required solutions is approximately 20 °C.

I.2 Kit components

10 x sodium thiosulphate in glass vials labelled:
A sodium thiosulphate (N767)
10 x potassium hexacyanoferrate in test tubes labelled: **B** potassium hexacyanoferrate (N768)
Contents of this Kit may not be bought separately.

Carl Roth GmbH + Co. KG
Schoemperlenstraße 3-5
76185 Karlsruhe
Postfach 100121
76231 Karlsruhe
Telefon: +49 (0) 721/ 5606-0
Telefax: +49 (0) 721/ 5606-149
E-Mail: info@carlroth.de
Internet: www.carlroth.de
s.t. 04/2017

I.3 Additional chemicals required

water, double distilled, Art.No. 3478.1
acetic acid 100 % p.a., Art.No. 3738.1
ethanol p.a., Art.No. 9065.1
or ethanol, denaturated, Art.No. K928.1
Rotisol®, Art.No. 7917.1

II Destaining of silver stained proteins and DNA

Attention:
Please carry out the various staining steps under gentle shaking. The following procedure is appropriate for both **film supported** and **conventional** gels.

II.1 With a maximum gel volume of 10 ml (e.g. 10 x 10 cm x 1 mm).

A) Washing:
When silver staining is finished (before the drying step) your gel is located in stopping or washing solution. Discard solution and wash your gel for 2 x 10 min in 100 ml $H_2O_{dd.}$

B) Preparation of Solutions:
a) Destaining sol.
Add the content of an „A-labelled“ vial to a beaker and dissolve the sodium thiosulphate in 100 ml H_2O_{dd} while stirring. Centrifuge briefly a „B-labelled“ test tube and pipette 1 ml H_2O_{dd} to it. Dissolve the potassium cyanoferrate completey by vortexing. Now add the content of test tube B to solution A and mix thoroughly.

b) Stopping solution (300 ml):
45 ml ethanol abs.
+ 36 ml acetic acid 100 %
Adjust to a volume of 300 ml with H_2O_{dd}.

c) Drying solution (100 ml):
10 ml glycerol
+15 ml ethanol
Adjust to a volume of 100 ml with H_20_{dd} .

C) Destaining and Washing:
Overlay the gel with the freshly prepared solution and shake gently. Watch the destaining process and discard the solution (right before) just **before** you have reached an optimal result. Immediately wash your gel with plenty of water. Thereafter wash your gel 3 x 10 min in 100 ml stopping solution to stop the reaction completely. While washing the yellow coloured background disappears.

D) Drying:
Incubate the gel ≥30 min in the drying solution. The gel can then be dried between two sheets of cellophane film. We recommend using our drying frame (ref. K420.1, K421.1).

II.2 With a maximum gel volume of 40 ml (e.g. 20 cm x 20 x 1 mm).

A) Washing:
When silver staining is finished (before the drying step) your gel is located in stopping or washing solution. Discard solution and wash your gel for 2 x 10 min in 100 ml $H_2O_{dd.}$

B) Preparation of solutions:
a) Destaining sol.
Add the content of two „A-labelled“ glass vial to a beaker and dissolve the sodium thiosulphate in 100 ml H_2O_{dd} while stirring. Centrifuge briefly two „B-labelled“ test tube and pipette 1 ml H_2O_{dd} to each. Dissolve the potassium cyanoferrate completey by vortexing. Now add the content of both test tubes B to solution A and mix thoroughly.
b) Stopping solution (600 ml):
90 ml etanol abs.
+ 72 ml acetic acid 100 %
Adjust to a volume of 600 ml wih H_2O_{dd}.
c) Drying solution (200 ml):
20 ml glycerol
+30 ml ethanol
Adjust to a volume of 200 ml with H_20_{dd} .

C) Destaining + Washing:
Overlay the gel with the freshly prepared solution and shake gently. Watch the destaining process and discard the solution (right before) just **before** you have reached an optimal result. Immediately wash your gel with plenty of water. Thereafter wash your gel 3 x 10 min in 200 ml stopping solution to stop the reaction completely. While washing the yellow coloured background disappears.

D) Drying:
Incubate the gel at least 30 mins. in the drying solution. The gel can then be dried between two sheets of cellophane film.

III. Further products:

Rotilabo®-**staining chambers**
(Art. Nos. H591.1, H592.1).
Gel Drying Frames (Art. Nos. K420.1, K421.1).

Roti®-Black P
silver staining kit for **proteins**
L533.1 for 10 gels with a maximum vol. of 10 ml
L533.2 für 10 gels with a maximum vol. of 40 ml

Roti®-Black N
silver staining kit for **DNA**
N769.1 for 10 gels with a maximum vol. of 10 ml
N769.2 for 10 gels with a maximum vol. of 40 ml

Roti®-Black NSeq
silver staining kit for **DNA in sequenzing gels**
P081.1 1 Kit

Roti®-Bleach **N766.1**