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DALEX NonTox PAGE Stain

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Abstract

DALEX NonTox PAGE Stain is a non-toxic Commassie based protein dye for the detection of bands in SDS and Native PAGE. The easy and fast staining procedure does not require time consuming destaining of the gels and is compatible with mass spectrometry.
First protein bands are visible within minutes and in most cases gel documentation can be done after 15-30 minutes of staining.
The sensitivity depends on the gel's lane width and on how "packed" the protein band is, which depends on various factors such as acrylamide percentage of separation/stacking gel and MW of the protein. Under ideal conditions the detection limit can be as low as 5 ng per band.

Guidelines

Washing steps before staining the gel are required to remove SDS. Native PAGE gels do not contain SDS and can be stained directly after electrophoresis.

To prevent leaching of small proteins from the gel or to increase staining sensitivity, proteins can be fixated by immersing the gel in 25 % (v/v) isopropanol and 10 % (v/v) acetic acid for 15 minutes between electrophoresis and staining.

Materials

DALEX NonTox PAGE Stain
Distilled water

Washing

1 Remove the gel from the cassette and place it into a tray e.g. a weighing pan.
Immerse the gel in distilled water (50 ml for an 8 × 8 cm gel) and microwave for 30 s at 500 W.
Incubate with gentle shaking for 5 minutes and discard the water afterwards.
Repeat two more times.
00:05:00

Note

Native PAGE gels do not require washing because they do not contain SDS. In this case you can skip the washing step.

Staining

2 Add enough DALEX NonTox PAGE Stain to completely cover the gel (25 ml for an 8 × 8 cm gel).
Microwave for 10 s at 500 W.
00:00:10

3 Incubate with gentle swirling or rocking for at least 15 minutes or until the desired stainig intensity is reached.

4 Pour off the stainging solution and rinse the gel with water twice. To increase the contrast of the gel, the background can be reduced by washing the gel in water and heating in a microwave as described in step 1.