

Drying Gels stained with InstantBlue

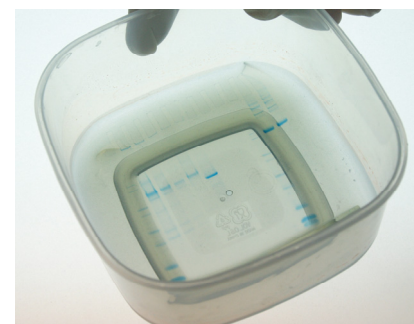
InstantBlue is a ready-to-use, proprietary Coomassie® stain that is specially formulated for ultra-fast, sensitive and safe detection of your proteins after electrophoretic separation. Gels can be stained in minutes without the need to wash, fix or destain. Long term storage of the stained gels can be achieved by drying the gel post staining with InstantBlue. An example of how this can be achieved is discussed below.

Protocol Summary

- Ⓢ Stain for at least 1 hour
- Ⓢ Wash with water:
1 hour with hot water or;
overnight with cold water
- Ⓢ Soak gel and cellophanes in 'Drying Solution' for 2 min
- Ⓢ Dry the gel for 36 to 48 hours or until dry.

• Staining the Gel

InstantBlue is an ultra fast working stain. However although protein bands will be visible after only a few minutes of incubation in InstantBlue, the staining process is typically fully completed after 1h incubation. Depending on the type of gel you are using longer incubation may be necessary. Further processing of the gel prior to completion of the staining process can result in protein destaining and reduced sensitivity. If this occurs simply restain the gel by incubating overnight in InstantBlue.



• Washing the Gel

Prior to drying, unreacted stain must be removed from the gel. This is easily done by washing the gel in water. By using hot water the speed of this process can be significantly increased. Submersing a gel in 100 ml water, microwaving it for 1 minute at maximum power and incubating this solution for 1 hour typically removes most of the unreacted stain. Alternatively the gel can be kept overnight in ultrapure water at room temperature without loss of sensitivity.

• Conditioning the Gel

To reduce the likelihood of cracks (when using gels other than RunBlue gels) and uneven drying submerge the gel in in a 'gel drying solution' (i.e. 4% glycerol, 20% ethanol in water) for maximum 5 minutes. Incubation of any Coomassie®-stained gel in an alcohol solution will eventually result in destaining of the bands so avoid incubation for longer than 5 minutes.

• Drying the Gel

Insert the gel between two wetted cellophane membranes and gently dry to further reduce the likelihood of cracking. Typically a gel can be dried within 48 hours.

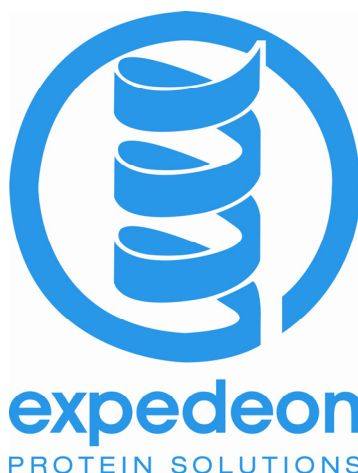


Standard Protocol

1. Remove the gel from the gel cassette
2. Immerse the gel in a volume of InstantBlue sufficient to cover the gel and incubate for at least 1 hour
3. Decant the stain and add 100 ml ultrapure water
4. Decant the water and add 100 ml fresh ultrapure water, microwave for 1 minute at maximum power and incubate for at least 1 hour
5. Prepare 'gel drying' solution by mixing 4 ml glycerol with 76 ml ultrapure water and 20 ml ethanol (4% v/v glycerol, 20% v/v ethanol)
6. Decant the water and add 100ml drying solution to the gel. Also immerse the cellophane membranes in the drying solution and incubate for 2 min
7. Install the drying rack on its holder and place one wetted membrane on the rack, followed by the gel and then the final membranes. Avoid air being trapped between the membranes and use additional drying solution if necessary.
8. Secure the rack with clips and stand upright for 36 to 48 hours to dry. Avoid drying too quickly as this increases the likelihood for cracking
9. Open the rack and remove the dried gel, trim the cellophane edges and stick in notebook for long term storage.

For technical support please e-mail scientist@expedeon.com

or call +44 (0)1223 496744



For latest case-studies see www.expedeon.com