

Amersham ECF Substrate

For the chemifluorescent detection of alkaline phosphatase

Product Specification Sheet

Code: RPN3685

Warning

For research use only.

Not recommended or intended for diagnosis of disease in humans or animals.

Do not use internally or externally in humans or animals.

Storage

Store at 2–8°C. Stable for at least 3 months when stored under the recommended conditions.

Safety warnings and precautions

All chemicals should be considered as potentially hazardous. We therefore recommend that this product is handled only by those persons who have been trained in laboratory techniques and that it is used in accordance with the principles of good laboratory practice. Wear suitable protective clothing such as laboratory overalls, safety glasses and gloves. Care should be taken to avoid contact with skin or eyes. In the case of contact with skin or eyes wash immediately with water. See material safety data sheet(s) and/or safety statement(s) for specific advice.

Component

- 60 ml, ECF detection buffer, contains Diethanolamine
- 36 mg, ECF substrate

Quality control

ECF™ substrate and ECF detection buffer are tested by GE Healthcare quality control group in DNA hybridizations using appropriate products from the Gene Images™ labelling and detection range.

Usage in non-radioactive detection

This product is compatible with all ECF substrate related products within the Gene Images range. Full labelling, hybridization and detection protocols are provided with the relevant products.

Please read through this whole section before proceeding.

Wear powder-free gloves or rinse gloved hands with water before use to remove powder.

Protocol

1. Pour the entire contents of the bottle containing the detection buffer into the bottle which contains the ECF detection reagent. Screw the top on firmly and shake the bottle gently (for example, on a roller-mixer) for about 10 minutes to fully dissolve the ECF detection reagent
2. Drain off any excess wash buffer from the blots (by touching the corner of the blot against the box used for washing the blots or other convenient clean surface) and place them (**sample side up**) on a clean, non-absorbent, flat surface.
3. Pipette ECF substrate on to the blots (~25 µl/cm²) and incubate for 1 minute. Transfer the blots directly to a fresh detection bag. Fold the plastic over the top of the blots and immediately spread the reagent evenly over the blots.
4. Seal the bag to stop the sample drying out and incubate at room temperature in the dark, for example in a drawer or a film cassette, for the required length of time. The optimal time for your particular system can be found by re-scanning at various times.
5. Place the bag containing the blot(s) on to the flat bed, fluorescent scanning instrument.
6. Scan the blot using an appropriate emission filter as available and according to the guidelines for use of the scanning instrument.

Notes

1. Store the dissolved ECF substrate, in aliquots, at -15°C to -30°C.
2. SaranWrap™ or a section cut from a Gene Image detection bag (RPN3609) can be used to place the blot upon. Proceed directly to step 3 so that the blots are not allowed to dry out.
3. This can be done either by rolling a 5 ml pipette over the surface or wiping the surface with a gloved hand.
4. For high target levels an acceptable scan image may be obtained after 1 hour. Scanning up to 24 hours after addition of substrate will provide a much stronger signal suited to low target applications.
5. Ethanol or water placed between the lower surface of the bag and the glass will greatly improve the image obtained.
6. ECF has a broad excitation spectrum with a maximum at 430 nm and an emission maximum at 560 nm.



Legal

GE and GE Monogram are trademarks of General Electric Company.

Amersham, AlkPhos Direct, ECF and Gene Images are trademarks of GE Healthcare companies

SaranWrap is a trademark of Dow Chemical Company

ECF Substrate is manufactured for GE Healthcare by Europa BioProducts. This component is covered by US patent number 5,424,440 and EP 424,465 B1 and is sold under license from Promega.

© 2007 General Electric Company – All rights reserved

GE Healthcare reserves the right, subject to any regulatory and contractual approval, if required, to make changes in specification and features shown herein, or discontinue the product described at any time without notice or obligation.

Contact your GE Healthcare representative for the most current information and a copy of the terms and conditions.

<http://www.gehealthcare.com/lifesciences>

GE Healthcare UK Limited
Amersham Place, Little Chalfont,
Buckinghamshire, HP7 9NA UK

GE Healthcare Bio-Sciences AB
Björkgatan 30 751 84,
Uppsala Sweden

GE Healthcare Europe GmbH
Munzinger Strasse 5 D-79111
Freiburg Germany

GE Healthcare Bio-Sciences Corp
800 Centennial Avenue PO Box 1327
Piscataway NJ 08855-1327 USA

GE Healthcare Bio-Sciences KK
Sanken Bldg 3-25-1, Hyakunincho Shinjuku-ku
Tokyo 169-0073 Japan



imagination at work