Amersham™ ECL™ Rainbow™ Marker - Full Range

(12 000–225 000 Da) Product Specification Sheet

Code: RPN800E

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.

Before using this product, please read the instructions for safe handling, storage and disposal

Safety warnings and precautions

Caution: For use with radioactive material.

This product may be used with radioactive material. Please follow the manufacturer's instructions relating to the handling, use, storage and disposal of such material.

Note: This product is used in conjunction with gel electrophoresis. Please follow the manufacturer's instructions relating to the handling and use of the equipment and materials.

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.

Description

Amersham ECL Rainbow Marker - Full Range is a mixture of individually colored proteins of defined size from GE. Purified proteins are combined to produce bands of equal color intensity and even spacing when separated on a polyacrylamide gel as described by Laemmli (1), Schagger and von Jagow (2), Swank and Munkres (3), Weber and Osborn (4).

Form

Supplied ready to use in 30% glycerol and sample buffer containing mercaptoethanesulphonic acid (MESNA) as reducing agent (5). Molecular weight (Da) Color

Concentration

Approx. 2 mg/ml of protein.

Storage

Store at -15°C to -30°C. Stable for at least 3 months when stored under recommended conditions.

Pack size

 $250\ \mu\text{I},$ sufficient for for 50 minigel loadings when used under recommended conditions.

Usage

Recommended minimum loadings are as follows: 8 × 10 cm gels: 5 µl of Amersham ECL Rainbow Marker - Full Range. 20 × 20 cm gels: 10 µl of Amersham ECL Rainbow Marker - Full Range.

- Remove the marker from storage at -15°C to -30°C and allow to equilibrate to room temperature. A precipitate of SDS may form on storage at -15°C to -30°C. If necessary <u>briefly</u> warm the solution at 37°C to dissolve the precipitate.
- **2.** Mix well and load the required volume of markers directly onto the gel.

More technical help, tips, and best practices can be found in the handbook *Western Blotting Principles and Methods* from GE (code no. 28-9998-97).

Related products

Amersham ECL DualVue Western Blotting Markers (15 000–150 000 Da) RPN810

Amersham ECL Plex Fluorescent Rainbow Markers (12 000–225 000 Da) RPN850E, RPN851E

Amersham ECL Rainbow Marker - Low Range, (3500–40 000 Da) RPN755E (8 protein ladder)

Amersham ECL Rainbow Marker - High Range, (12 000–225 000 Da) RPN756E (10 protein ladder)

References

- 1. Laemmli, U.K., Nature 227, 681 (1970).
- 2. Schagger, H. and von Jagow, G., Anal. Biochem. 166, 368 (1987).
- 3. Swank, R.T. and Munkres, K.D., Anal. Biochem. 39, 462 (1971).
- 4. Weber, K. and Osborn, M., J. Biol. Chem. 244, 4406 (1969).
- 5. Singh, R., Biotechniques. 17, 263 (1994).





Figure 1. Typical result RPN800E

4–20% Tris-Glycine gradient SDS-PAGE gel. Electrophoresis performed for 90 minutes at 125 V.

Quality control

Each batch of Amersham ECL Rainbow Marker - Full Range is assessed for color intensity and band integrity on a 4–20% Tris-Glycine gradient SDS-PAGE mini-gel.

24 k Green band

In some gel/buffer systems the mobility of this band may differ from that quoted using a Tris/Glycine/SDS buffer.

Measurement of protein sizes

The sizes of the labeled proteins have been determined by interpolation from a standard curve of Rf values of known molecular weight recombinant proteins on a 4–20% Tris-Glycine gradient SDS-PAGE gel.

Legal

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

http://www.gelifesciences.com

GE Healthcare offices: 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, P.O. Box 1327, Piscataway, NJ 08855-1327, USA

GE Healthcare Japan Corporation Sanken Bldg. 3-25-1, Hyakunincho, Shinjuku-ku, Tokyo 169-0073, Japan

