

# Amersham™ ECL™ Rainbow™ Marker - Low Range

(3500–40 000 Da)

## Product Specification Sheet

Code: RPN755E

### 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 - Low 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
38 000	Blue
31 000	Orange
24 000	Green
17 000	Blue
12 000	Red
8500	Yellow
3500	Blue

### Concentration

Approx. 1 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 µl, 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 - Low Range.  
20 × 20 cm gels: 10 µl of Amersham ECL Rainbow Marker - Low Range.

1. 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 briefly warm the solution at 37°C to dissolve the precipitate.
2. Mix well and load the required volume of markers directly on to 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

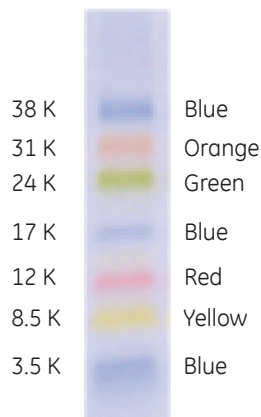
Amersham ECL Rainbow Marker - High Range, (12 000–225 000 Da) RPN756E (10 protein ladder)

Amersham ECL Rainbow Marker - Full Range, (12 000–225 000 Da) RPN800E (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 RPN755E**

4–20% Tris-Glycine gradient SDS-PAGE gel.  
18% Tris-Glycine SDS-PAGE gel Electrophoresis was performed for 90 minutes at 125 V.

### Quality control

Each batch of Amersham ECL Rainbow Marker - Low Range is assessed for color intensity and band integrity on an 18% Tris-Glycine 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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