Pro-Q Emerald
Glycoprotein Stain Kits

The most advanced technology for staining glycoproteins in gels or on blots

FAST
Staining is complete in less than three hours

SIMPLE
The procedure includes only three steps — fixation, oxidation and staining

SENSITIVE
More sensitive than any other nonradioactive glycoprotein staining technique

EASY TO VISUALIZE
The stain can be visualized using standard UV illumination or a laser scanner

MULTICOLOR CAPABILITIES
Compatible with SYPRO Ruby protein gel stain for dichromatic staining
Molecular Probes’ proprietary Pro-Q Emerald 300 and Pro-Q Emerald 488 Glycoprotein Stain Kits provide the most advanced technology available for detection of glycoproteins in gels and on blots. Gel staining is rapid and very sensitive; in less than three hours, it is possible to detect as little as 300 pg of glycoprotein per band, depending on the degree of glycosylation, making these stains at least 50-fold more sensitive than standard fuchsin staining. The staining procedure is very simple, requiring just three steps — fixation, periodate oxidation of carbohydrate groups, and incubation with the Pro-Q Emerald reagent (Figure 1). Blot staining requires extra steps, but also provides excellent sensitivity (2–18 ng of glycoprotein per band) as well as an opportunity to combine glycoprotein staining with immuno-staining or other blot-based detection techniques. Pro-Q Emerald 300 and Pro-Q Emerald 488 stains can be visualized using laser scanners. Both stains exhibit bright green fluorescence.

Two of the Pro-Q Emerald 300 Glycoprotein Stain Kits include one of our fluorescent SYPRO Ruby protein stains (see Ordering Information below). These total-protein stains are compatible with glycoprotein staining, making it easy to compare stained glycoproteins to molecular weight standards or to localize glycoproteins in 2-D gels (Figure 2). The gel stain (in P-21855) provides a control for protease contamination in mobility shift assays (see front figure). The blot stain (in P-21856) is useful for assessing the efficiency of protein transfer to the blot; this is especially important when working with glycoproteins, which often transfer poorly to blotting membranes. Stained proteins can be visualized using either UV illumination or a laser scanner.

Each kit also includes our CandyCane molecular weight standards, which separate into alternating bands of glycosylated and nonglycosylated proteins (Figure 3).

Materials Supplied
- Pro-Q Emerald reagent
- Pro-Q Emerald staining buffer
- Oxidizing reagent
- SYPRO Ruby protein gel stain (in Kit P-21855 only)
- SYPRO Ruby protein blot stain (in Kit P-21856 only)
- CandyCane glycoprotein molecular weight standards
- A detailed protocol

Each kit provides sufficient materials to stain approximately ten 8 cm x 10 cm gels or blots.

Ordering Information
P-21855 Pro-Q™ Emerald 300 Glycoprotein Gel Stain Kit (with SYPRO® Ruby protein gel stain)
P-21856 Pro-Q™ Emerald 300 Glycoprotein Blot Stain Kit (with SYPRO® Ruby protein gel blot stain)
P-21857 Pro-Q™ Emerald 300 Glycoprotein Gel and Blot Stain Kit
P-21875 Pro-Q™ Emerald 488 Glycoprotein Gel and Blot Stain Kit

References

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