

# CE Dye Kits

capillary electrophoresis made easy

Active Motif's CE Dye Kits provide a convenient alternative for the fluorescent labeling of protein samples prior to capillary electrophoresis. Capillary electrophoresis (CE) has proven to be a useful tool in modern cell biology applications as it enables the rapid and high-resolution separation of proteins in a microsample format. However, traditional CE performed using UV absorbance can suffer from a lack of sensitivity due to the short path length across the capillary. To improve CE, the large Stokes shift dyes contained within the CE Dye Kits large not only maintain the natural ionic character of labeled proteins (Figure 1), but they undergo a shortwave length shift upon protein binding (Figure 2). They also display a 50-fold increase in quantum yield. The result is sensitive protein detection, reduced background and single peak protein detection.

For your convenience, Active Motif offers two CE Dye Kits. The CE Dye 503 requires excitation at 503 nm, while the CE Dye 540 requires excitation at 540 nm; both share a common emission maximum at 600 nm.

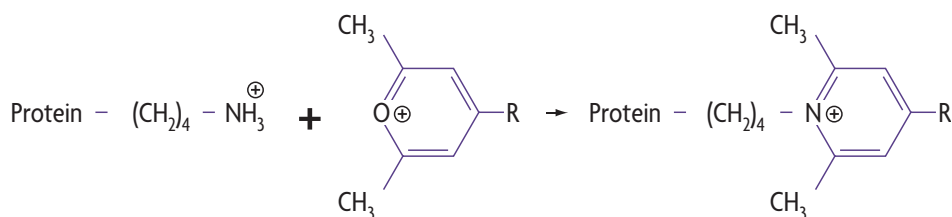
## The CE Dye Kit advantage

- User-friendly, non-toxic labeling
- Large Stokes shift for reduced background
- Fast and simple procedure



**Figure 2: Color shift caused by dye conjugation.**

The CE Dye labeling process is simple to perform with completion of the reaction observed by a color change from blue to red.



**Figure 1: Labeling with CE Dyes maintains each protein's natural charge.**

Chemical equation of the chemistry of CE Dye labeling, which demonstrates the preservation of the positive charge of the lysine residue of the protein after dye binding. (R stands for the respective chromogenic/fluorogenic group.)

Product	Format	Catalog No.
CE Dye 503	1 kit	15101
CE Dye 540	1 kit	15102

### CONTENTS

Each CE Dye Kit supplies sufficient reagents for performing 200-400 assays.