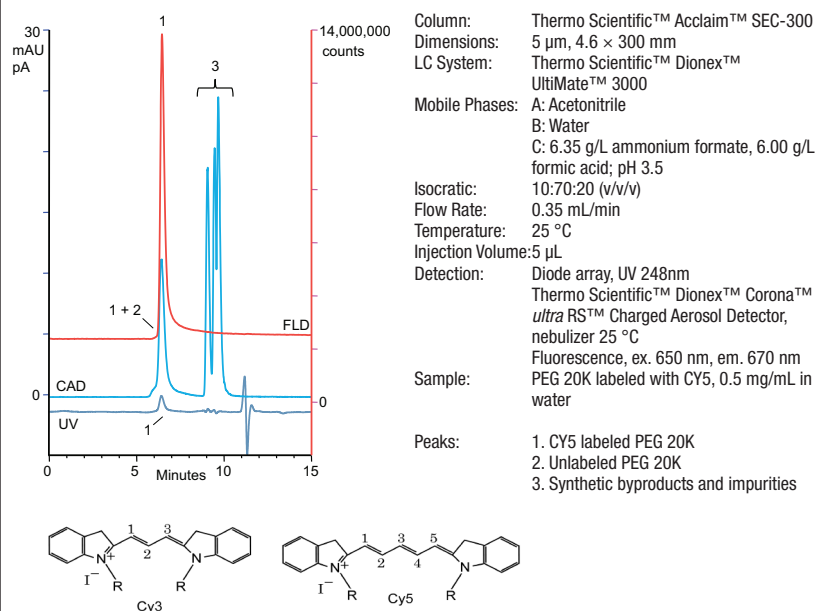


PEG-20K Labeled with CY5 Using Acclaim SEC-300



PB20772_E 03/13S

Cyanine dyes are a versatile family of fluorescent dyes. They have been elaborated into reactive labels by providing appropriate R-groups. In this example, polyethylene glycol mono-methyl ether has been labeled with CY5. The Acclaim SEC-300 column separates the PEG from the reaction byproducts using size exclusion, but does not resolve labeled from unlabeled PEG. The CY5-labeled PEG is detected by both the FLD and UV; in contrast the CAD detects the labeled and unlabeled PEG equally. Both the UV and CAD detect some of the synthetic byproducts. The FLD offers excellent S/N = 4300 for low-level detection; the UV with S/N = 7 is only suited for very high-level detection. Using multiple detectors allows the reaction yield to be calculated.