

Cyanine dyes for biological detection

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Cyanine dyes are widely used as protein, nucleic acid and cell labels. Cyanines can be created at many wavelengths for multi-spectral detection and can be structurally altered in many ways to control solubility, non-specific interactions, target reactivity, brightness and wavelength shift. This presentation will include these strategies and their relative successes. Applications of cyanine labels in array detection, sequencing and microscopy will be presented. Some ideas for future directions in fluorescence detection will be offered.