

## Cy5, SE

<b>Cat. Number:</b>	D-9604
<b>Quantity Size:</b>	1mg
<b>Molecular Weight:</b>	792Da
<b>Excitation maximum:</b>	650nm
<b>Emission maximum:</b>	670nm
<b>Storage:</b>	Store at -20°C. Protect from light.

Cy3 fluoresces greenish yellow (~550 nm excitation, ~570 nm emission), while Cy5 is fluorescent in the red region (~650 excitation, 670 nm emission). Cy3 can be detected by various fluorometers, imagers, and microscopes with standard filters for Tetramethylrhodamine (TRITC). Due to inherently high extinction coefficient, this dye is also easily detected by naked eye on gels, and in solution. Cy5 become very popular to replace far red fluorescent dyes, because of its high extinction coefficient (as small as 1 nanomol can be detected in gel electrophoresis by naked eye) and of its fluorophore emission maximum in red region, where many CCD detectors have maximum sensitivity, and biological objects have low background.

The scanners actually use different laser emission wavelengths (typically 532 nm and 635 nm) and filter wavelengths (550-600 nm and 655-695 nm) to avoid background contamination. They are thus able to easily distinguish colors from Cy3 and from Cy5, and also able to quantify the amount of Cy3 and Cy5 labeling in one sample (multiparametric detection).