

## Product Information Sheet

### Ordering Information

Product Number: 11065

Product Name: Cy3 tyramide

Unit Size: 1 mg

Storage Conditions: Freeze (<-15 °C), Desiccated, Avoid Light

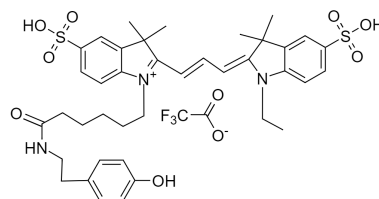
Expiration Date: 12 months upon receiving

### Chemical and Spectral Properties

Appearance: Solid

Molecular Weight: 863.96

Chemical Structure:



Soluble In: DMSO

Excitation Wavelength: 555

Emission Wavelength: 565

### Application Notes

For many immunohistochemical (IHC) applications, the traditional enzymatic amplification procedures are sufficient for achieving adequate antigen detection. However, several factors limit the sensitivity and utility of these procedures. Tyramide signal amplification (TSA) has proven to be a particularly versatile and powerful enzyme amplification technique with improved assay sensitivity. TSA is based on the ability of HRP, in the presence of low concentrations of hydrogen peroxide, to convert labeled tyramine-containing substrate into an oxidized, highly reactive free radical that can covalently bind to tyrosine residues at or near the HRP. To achieve maximal IHC detection, tyramine is pre-labeled with a fluorophore. The signal amplification conferred by the turnover of multiple tyramide substrates per peroxidase label translates ultrasensitive detection of low-abundance targets and the use of smaller amounts of antibodies and hybridization probes. In immunohistochemical applications, sensitivity enhancements derived from TSA method allow primary antibody dilutions to be increased to reduce nonspecific background signals, and can overcome weak immunolabeling caused by suboptimal fixation procedures or low levels of target expression. Cy3 tyramide contains the bright Cy3 that can be readily detected with the standard Cy3 filter set.