iFluor™ 633 tyramide

Catalog number: 11083
Unit size: 200 Slides

Product Details

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	1271.67
Soluble In	DMSO

Spectral Properties

Excitation Wavelength	640 nm
Emission Wavelength	654 nm

Applications

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. 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. iFluor™ 633 tyramide contains the bright iFluor™ 633 fluorophore that can be readily detected with the standard Cy5 filter set. iFluor™ 633 is one of the brightest NIR fluorophores. Its NIR excitation and emission make the probe an ideal choice for the applications where the common tyramides may have an interference resulted from the inherent fluorescence of tissues or other samples.