

**XFD 514 tyramide**Catalog number: 11071  
Unit size: 200 Slides**Product Details**

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

**Chemical Properties**

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Appearance	Solid
Molecular Weight	938.17
Soluble In	DMSO

**Spectral Properties**

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Excitation Wavelength	518 nm
Emission Wavelength	543 nm

**Applications**

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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. XFD 514 tyramide contains the Alexa Fluor® 514 fluorophore that can be readily detected with the standard rhodamine 6G filter set (Alexa Fluor® is the trademark of ThermoFisher). XFD 514 tyramide has intense green-yellow fluorescence color.