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sulfo-Cyanine7 tyramide

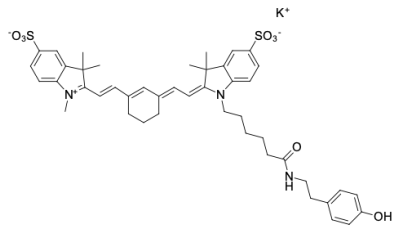
http://hk.lumiprobe.com/p/sulfo-cyanine7-tyramide

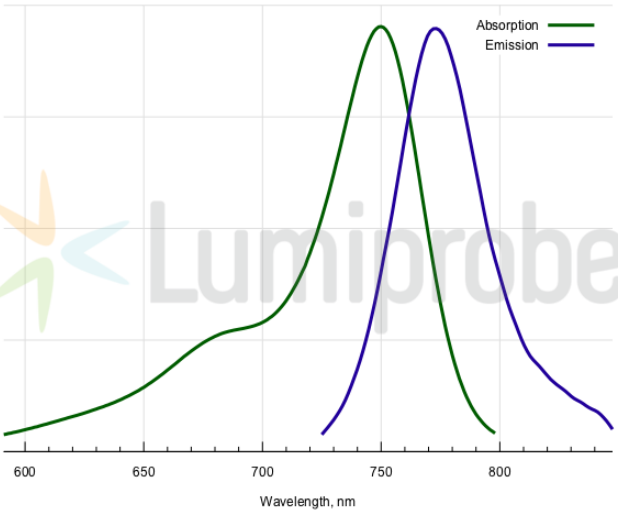
Thyramide signal amplification (TSA) is the most versatile and effective way to enhance the intensity of the fluorescent signal, used in immunohistochemistry (IHC), immunocytochemistry (ICC), and fluorescence *in situ* hybridization (FISH). The TSA method is based on the ability of horseradish peroxidase (HRP) in the presence of low concentrations of hydrogen peroxide to convert a labeled tyramine-containing substrate into an oxidized, highly reactive free radical that covalently binds to the tyrosine residues of protein molecules located next to it.

Compared to conventional procedures, the TSA method increases the sensitivity of immunofluorescent detection of target molecules by more than 100 times, making it particularly suitable for detecting low-concentration targets. In applications where increased detection sensitivity is not required, TSA can significantly reduce antibody or probe concentrations without loss of signal intensity, thereby reducing background staining due to cross-reactivity or non-specific binding of antibodies.

Since the binding of the tyramide label is covalent, tyramides of different dyes can be used in several sequential rounds of TSA staining to detect multiple targets in the same sample.

This tyramide is a conjugate of the water-soluble near-infrared fluorescent dye sulfo-Cyanine7. sulfo-Cyanine7 tyramide (also known as Cy7® and Cyanine7 tyramide from other manufacturers) is a component of many tyramide signal amplification (TSA) kits. It can be used with any antibody or other molecules (streptavidin, etc.) conjugated to HRP to stain cells and tissues by immunofluorescence methods.





外观:

分子量: 866.16

分子式: $C_{45}H_{52}KN_3O_8S_2$

溶解度:

质量控制:

储存条件:

激发/吸收极大值，纳米: 750

ε, 摩尔吸光系数，cm^{-1}: 240600

发射极大值，纳米: 773

荧光量子产率: 0.24

CF_{260}: 0.04

CF_{280}: 0.04