

## sulfo-Cyanine5-PEG3-biotin

http://cn.lumiprobe.com/p/sulfo-cy5-peg3-biotin

sulfo-Cyanine5 is a far-red fluorophore widely used for biomolecule labeling, with excitation maximum at 646 nm and emission maximum at 662 nm. Far-red fluorescent tags with excitation above 600 nm and emission further than 650 nm are valuable for imaging techniques because of the lower background autofluorescence at these wavelengths. Besides, far-red fluorescent labels can be imaged simultaneously with near-red, orange, green, and blue tags, which is advantageous for multicolor imaging.

Biotin, or the water-soluble vitamin H, is well known not only for playing essential roles in various crucial metabolic cellular reactions but also for its extremely high affinity for avidin, a glycoprotein of egg white. Avidin, streptavidin (bacterial analogue of avidin), and neutravidin (deglycosylated avidin) bind non-cooperatively to biotin with high affinity. Thus, sulfo-Cyanine5 biotin conjugate can be used for detecting and quantifying biotin binding sites of avidin, streptavidin, and neutravidin in samples of different origin.

sulfo-Cyanine5 biotin conjugate is a water-soluble reagent and its fluorescence is pH independent from pH 4 to pH 10. A flexible PEG3 linker between biotin moiety and fluorescent tag provides binding to avidin, streptavidin, or neutravidin without steric troubles.

The major applications of sulfo-Cyanine5 biotin conjugate include imaging (e.g. primary and secondary antibody labeling for Western Blotting, immunoassay, cyto- and histochemistry, flow cytometry), affinity and dissociation constant measuring, streptavidin-based sensors, etc.



 外观:
 1037.36

 分子量:
 1037.36

 分子式:
 C<sub>48</sub>H<sub>65</sub>N<sub>6</sub>KO<sub>11</sub>S<sub>3</sub>

 溶解度:
 质量控制:

 储存条件:

激发/吸收极大值,纳米: 646
ε,摩尔吸光系数, cm<sup>-1</sup>: 271000
发射极大值,纳米: 662
荧光量子产率: 0.28
CF<sub>260</sub>: 0.04
CF<sub>280</sub>: 0.04