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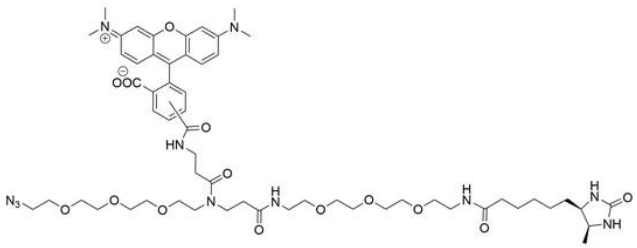
TAMRA DESTHIOBIOTIN AZIDE

SKU: CCT-1110



DESCRIPTION

Trifunctional Click Chemistry Probes that incorporate a ligation handle, a biotin and a fluorophore have become a popular tool for for tandem labeling of proteins and subsequent detection or enrichment. However, due to the strong interaction between biotin and streptavidin harsh conditions are necessary for the elution of enriched proteins. This usually leads to contamination of the sample with non-specifically bound proteins and endogenously biotinlytated proteins, which complicates target identification. Desthiobiotin Trifunctional Click Chemistry Probes overcome this major drawback of the streptavidin-biotin affinity purification. These probes contain a biotin moiety linked to a “clickable” group, and fluorescent dye (TAMRA).

Desthiobiotin is a single-ring, sulfur-free analog of biotin that binds to streptavidin with nearly equal specificity but less affinity than biotin (K_d = 10^{11} vs. 10^{15}M, respectively). Consequently, desthiobiotinylated proteins can be eluted readily and specifically from streptavidin affinity resin using mild conditions based on competitive displacement with free biotin. For pull-down experiments with biological samples, this soft-release characteristic of desthiobiotin also helps to minimize co-purification of endogenous biotinylated molecules, which remain bound to streptavidin upon elution of the target protein complexes with free biotin. Another very important advantage of dual label probes over regular biotin probes is built-in control. Each step of enrichment process can easily followed either by UV-Vis (550 nm) or by more sensitive

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fluorescence spectroscopy. After elution form streptavidin beads target proteins containing TAMRA label can be easily distinguished from non-specifically bound proteins and endogenously biotinlytated proteins.

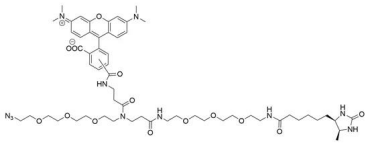
SPECIFICATIONS

CAS Number	N/A
Molecular Weight	1145.33
Appearance	Red solid
Chemical Formula	C57H82N11O14
Unit Size	1 mg, 5 mg, 25 mg
Solubility	DMSO, DMF
Storage Instructions	-20°C.
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

DOCUMENTS

- Safety Data Sheet
- Datasheet

GALLERY IMAGES



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