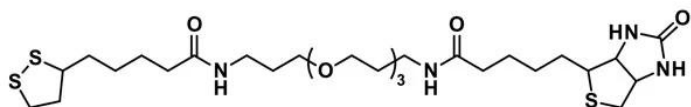


BIOTIN-DPEG®₃-LIPOAMIDE

SKU: QBD-10820



Biotin-dPEG₃-lipoamide, product number 10820, is a water-soluble PEGylation reagent designed to facilitate the biotinylation of a gold, silver, or other metal surface through a short (22 atoms, 27.7 Å) lipoic acid-functionalized single molecular weight, discrete PEG (dPEG₃) spacer. The lipoic acid moiety forms dative bonds with gold, silver, and other metals, while the flexible, hydrophilic dPEG₃ spacer increases the hydrodynamic volume of the conjugate surface. This reduces or eliminates opsonization of the conjugate, contributing to a longer serum circulation time in vivo. Moreover, the water-soluble dPEG₃ linker improves the hydrophilicity of the biotin label, which is poorly soluble in water, reducing aggregation, precipitation, and non-specific interactions due to hydrophobicity. Potential applications for this product include pull-down assays, affinity chromatography, and biotin-based antibody pretargeting for radioimmunotherapy.

Specifications

Unit Size	100mg, 1000mg
Molecular Weight	634.91; single compound
Chemical formula	C ₂₈ H ₅₀ N ₄ O ₆ S ₃
CAS	1334172-74-5
Purity	> 96%
Spacers	dPEG ₃ Spacer is 22 atoms and 27.7 Å
Shipping	Ambient
Typical solubility properties (for additional information contact Customer Support)	DMAC, DMSO, acetonitrile, poorly soluble in methylene chloride. Insoluble in water.

For research use only. Not intended for animal or human therapeutic or diagnostic use.

Storage and handling

-20°C; Always let come to room temperature before opening; be careful to limit exposure to moisture and restore under an inert atmosphere; stock solutions can be prepared with dry solvent and kept for several days (freeze when not in use). dPEG® pegylation compounds are generally hygroscopic and should be treated as such. This will be less noticeable with liquids, but the solids will become tacky and difficult to manipulate, if care is not taken to minimize air exposure.

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