## Certificate of Analysis



Product Name: Biotin-dPEG®<sub>4</sub>-hydrazide

SKU Number: QBD-10219

Lot Number: AF1-A0402-005

Molecular Weight: 505.63

ASSAY	SPECIFICATION	LOT DATA
Appearance	Off-white to white solid	Off-white solid
<sup>1</sup> H NMR (Structural)	Consistent with structure	Consistent with structure
<sup>1</sup> H NMR (Purity)*	>95%	98.5%
HPLC-ELSD (Purity)**	>98%	99.7%

<sup>\*</sup>Determined by quantitative <sup>1</sup>H NMR using an internal standard. Purity is the mean of three (3) independent samples.

This document certifies that Lot AF1-A0402-005 was analyzed and released by Vector Laboratories Quality Control on November 14, 2017, and was found to meet the currently established test parameters. The lot was retested on January 30, 2025, and was again found to meet the established test parameters. This document is an updated version of the original Certificate of Analysis.

Dave Schory, M.S. QC Manager

Vector Laboratories certifies on the date above that this is an accurate record of the analysis of the subject lot and that the data conform to the specifications in effect for this product at the time of analysis.

<sup>\*\*</sup>Determined by RP-HPLC using Evaporative Light-Scattering Detection (ELSD). Purity is the mean of three (3) independent samples.