Certificate of Analysis



Product Name: Biotin-dPEG®₃-MAL

SKU Number: QBD-10201

Lot Number: JS1-A0305-012

Molecular Weight: 597.73

| ASSAY | SPECIFICATION | LOT DATA |
|---------------------------------|---------------------------|---------------------------|
| Appearance | Off-white to white solid | White solid |
| ¹ H NMR (Structural) | Consistent with structure | Consistent with structure |
| ¹ H NMR (Purity)* | >95% | 97.5% |
| HPLC-ELSD (Purity)** | >98% | 99.8% |

^{*}Determined by quantitative ¹H NMR using an internal standard. Purity is the mean of two (2) independent samples.

This document certifies that Lot JS1-A0305-012 was analyzed and released by Vector Laboratories Quality Control on February 19, 2021, and was found to meet the currently established test parameters. This lot was tested on February 13, 2023, and December 23, 2024 and was again found to meet the currently 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.

^{**}Determined by RP-HPLC using Evaporative Light-Scattering Detection (ELSD). Purity is the mean of three (3) independent samples.