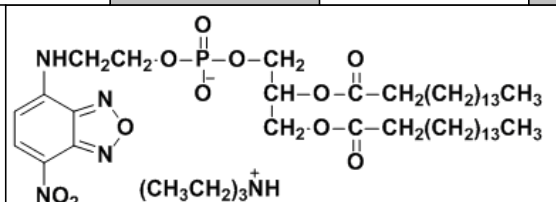


| Certificate of Analysis         |                                                                                                 |                                                                                                                                       |                                                                  |                         |
|---------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------|
| (C of A)                        |                                                                                                 |                                                                                                                                       |                                                                  |                         |
| Name:                           |                                                                                                 | NBD-PE<br>NBD-DHPE [N-(7-Nitrobenz-2-oxa-1,3-diazol-4-yl)-1,2-dihexadecanoyl-sn-glycero-3-phosphoethanolamine, triethylammonium salt] |                                                                  |                         |
| Catalog Number:                 | 6232                                                                                            | Lot:                                                                                                                                  | 52213                                                            |                         |
| CAS Number:                     | 178119-00-1                                                                                     | Formula:                                                                                                                              | C <sub>49</sub> H <sub>90</sub> N <sub>5</sub> O <sub>11</sub> P |                         |
| Molecular Weight:               | 956.24 (g/mol)                                                                                  |                                                                                                                                       |                                                                  |                         |
|                                 |                                                                                                 |                                                                                                                                       |                                                                  |                         |
|                                 | Observed                                                                                        | Standard                                                                                                                              |                                                                  |                         |
| HPLC Purity:                    | 99% at 462 nm                                                                                   | ≥ 95% at 462 nm                                                                                                                       |                                                                  |                         |
| Absorption (Methanol)           |                                                                                                 |                                                                                                                                       |                                                                  |                         |
| Wavelength (λ <sub>max</sub> ): | 463 nm                                                                                          | 463 ± 3 nm                                                                                                                            |                                                                  |                         |
| Extinction:                     | 26,100 cm <sup>-1</sup> M <sup>-1</sup>                                                         | 24,000 ± 2,500 cm <sup>-1</sup> M <sup>-1</sup>                                                                                       |                                                                  |                         |
| Fluorescence (Methanol)         |                                                                                                 |                                                                                                                                       |                                                                  |                         |
| Emission Max:                   | 534 nm                                                                                          | 534 ± 4 nm                                                                                                                            |                                                                  |                         |
| TLC Purity:                     | > 98%                                                                                           | ≥ 95%                                                                                                                                 |                                                                  |                         |
| TLC System:                     | 85:13:2 Chloroform / Methanol / Acetic acid                                                     |                                                                                                                                       |                                                                  |                         |
| Storage:                        | Freeze: Store at -5 to -30°C (F), Protect from moisture (D), Protect from light (L)             |                                                                                                                                       |                                                                  |                         |
| Production Lot:                 | 14479                                                                                           | Release:                                                                                                                              | 30-Dec-2020                                                      | Expiration: 30-Dec-2030 |
| Structure:                      | <div></div> |                                                                                                                                       |                                                                  |                         |

This data reflects the accuracy of the analysis of the subject lot  
 For research use only. Not for human use. No animal source.  
 This material is chemically synthesized and manufactured in the USA

**Approved by:** Dianna M Wineinger  
 Analytical Services Manager

**Date:** 30-Dec-2020

**Signature:** 