

## Certificate of Analysis

## Brain PI(4)P

L-α-phosphatidylinositol-4-phosphate (Brain, Porcine) (ammonium salt)

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**Molecular Weight** 974.764 (average based on fatty acid distribution in product)

Physical State Powder Storage -20°C

**Expiration Date** Three months from date of receipt

M Lot Number 5506PIC049

Avanti Lot Number 840045P-10MG-C-049

| ANALYSIS  | SPECIFICATION  | RESULTS  |
|---|--|--|
| Physical Examination  | <b>Powder</b> : White solid which contains no foreign matter   | Pass   |
| TLC<br>(45:35:7.7:2.3 Chloroform: Methanol:<br>Water: Ammonium Hydroxide) | >99% Purity Ninhydrin: negative Iodine: one major spot Phosphorus: positive Charring: positive Water dip: one major spot                 | All Pass   |
| UV Oxidation  | NMT 5% total all wavelengths   | 2.99% total  |
| Calcium (ICP/MS)  | NMT 500 ppm  | 149 ppm  |
| Proton NMR  | NMR spectrum consistent with structure   | Consistent with structure  |
| Phosphorus NMR  | NMR spectrum consistent with structure   | Consistent with structure  |
| Mass Spectroscopy   | [M-2NH <sub>4</sub> +H] <sup>-</sup> = 966.764 ± 1 amu<br>[M-2NH <sub>4</sub> ] <sup>2-</sup> = 482.882 ± 1 amu<br>(predominant species) | [M-2NH <sub>4</sub> ] <sup>2-</sup> = 482.7 amu<br>(predominant species) |

Approved By:

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