## Brain PI(4,5)P2

L-α-phosphatidylinositol-4,5-bisphosphate (Brain, Porcine) (ammonium salt)

### 840046X-1mg

<table>
<thead>
<tr>
<th><strong>Molecular Weight</strong></th>
<th>1096.385 (average based on fatty acid distribution in product)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical State</strong></td>
<td>20:9:1 Chloroform: Methanol: Water</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>-20°C</td>
</tr>
<tr>
<td><strong>Expiration Date</strong></td>
<td>Three months from date of receipt</td>
</tr>
<tr>
<td><strong>M Lot Number</strong></td>
<td>5507XGB072</td>
</tr>
<tr>
<td><strong>Avanti Lot Number</strong></td>
<td>840046X-1MG-B-072</td>
</tr>
</tbody>
</table>

### ANALYSIS | SPECIFICATION | RESULTS

<table>
<thead>
<tr>
<th>Physical Examination</th>
<th>CMW 20:9:1: Clear solution with no foreign matter.</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLC</td>
<td>&gt;99% Purity</td>
<td>All Pass</td>
</tr>
<tr>
<td>(45:35:7.7:2.3 Chloroform: Methanol: Water: Ammonium Hydroxide)</td>
<td>Ninhydrin: negative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Iodine: one major spot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phosphorus: positive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Charring: positive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water dip: one major spot</td>
<td></td>
</tr>
<tr>
<td>UV Oxidation</td>
<td>NMT 5% total all wavelengths</td>
<td>2% total</td>
</tr>
<tr>
<td>Proton NMR</td>
<td>NMR spectrum consistent with structure</td>
<td>Consistent with structure</td>
</tr>
<tr>
<td>Phosphorus NMR</td>
<td>NMR spectrum consistent with structure</td>
<td>Consistent with structure</td>
</tr>
<tr>
<td>Calcium (ICP/MS)</td>
<td>NMT 500ppm</td>
<td>None Detected</td>
</tr>
<tr>
<td>Mass Spectroscopy</td>
<td>[M-3NH₄⁺H⁺⁺⁺] = 1045.385 ± 1 amu</td>
<td>[M-3NH₄⁺H⁺⁺⁺] = 1046.1 amu</td>
</tr>
<tr>
<td></td>
<td>[M-3NH₄⁺H⁺⁺] = 522.193 ± 1 amu</td>
<td>[M-3NH₄⁺H⁺⁺] = 522.6 amu</td>
</tr>
<tr>
<td></td>
<td>(predominant species)</td>
<td>(predominant species)</td>
</tr>
</tbody>
</table>

Approved By: [Signature]

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