

# Lysophosphatidic Acid Catalog# SIH-403-25MG

Size: 25mg

PO Box 55036 Cadboro Bay  
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This product is for *in vitro* research use only and is not intended for use in humans or animals

## StressMarq Biosciences Inc.

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|-------------------|--|
| Product Name      | Lysophosphatidic Acid  |
| Alternative Names | Oleoyl-lysophosphatidic acid   |
| Description       | Autophagy inhibitor  |
| CAS#              | 22556-62-3   |
| Molecular Formula | C <sub>21</sub> H <sub>41</sub> O <sub>7</sub> P                             |
| Molecular Weight  | 436.5245   |
| Source            | Synthetic  |
| Purity            | ≥96%   |
| Solubility        | Soluble to 10 mM in phosphate buffered saline.                               |
| Appearance        | Waxy solid.  |
| Storage           | -20 °C;  |
| Stability         | 1 year+ as supplied  |
| Shipping          | Shipped Ambient  |
| SMILES            | <chem>C(O[P](=O)(O)O)C(O)COC(=O)CCCCC</chem><br><chem>CC\C=C/CCCCCCCC</chem> |

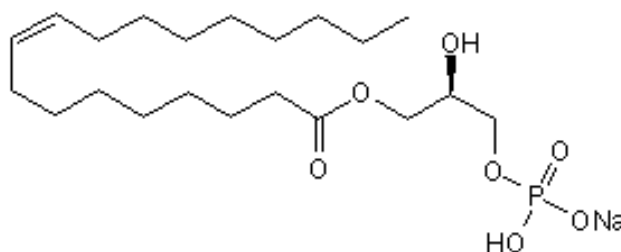


Figure 1: Chemical structure of Lysophosphatidic Acid (SIH-403-25MG), a Autophagy inhibitor.

### Scientific Background

Oleoyl-lysophosphatidic acid is an endogenous agonist of the lysophospholipid receptors LPA1 and LPA2. It has been shown to induce cellular functions such as cell proliferation and migration, and ICAM-1, IL-8 and MCP-1 expression. Lysophosphatidic acid has also been observed to inhibit autophagy in cells under starvation conditions by inhibiting autophagosome formation.

### References

1. van Corven, E. J. et al. (1992). *Biochem J*, 281 (Pt 1):163-9.
2. Chang, C. L. et al. (2007). *Autophagy*, 3(3):268-70.

# Material Safety Data Sheet

## Lysophosphatidic Acid

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The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

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### Regulatory Information

Classification: Not WHMIS controlled.

Safety Phrases:

S22 - Do not breathe dust.

S24/25 - Avoid contact with skin and eyes.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

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### Physical Data

- This product consists of whole rabbit serum shipped on gel packs. The physical properties of this product have not been investigated thoroughly.

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### Fire and Explosion Hazard and Reactivity Data

- NOT APPLICABLE

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### Toxicological Properties

- May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

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### Preventative Measures

- Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

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### Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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### First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.