

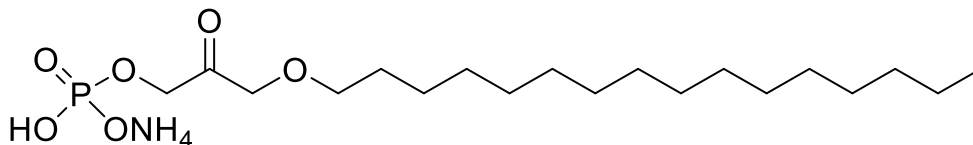
## Hexadecyl dihydroxyacetone phosphate, ammonium salt

Catalog number: L-0320

Molecular Formula:  $C_{19}H_{42}NO_6P$

MW: 411.51

CAS: 32113-53-4



Alternate Name: Hexadecyl-DHAP

Solubility:  $CHCl_3$ :MeOH:H<sub>2</sub>O (1:2:0.8) ; tert-Butyl Alcohol:H<sub>2</sub>O (1:1)

Storage and Handling: Store dry at -20 °C. Stock solutions should be stored frozen (-20 °C or below).

Background: Ether lipids have been implicated in cell membrane function and can act as signaling molecules; however their roles in cell physiology are still not completely understood. The key step for ether lipid biosynthesis is the conversion of acyldihydroxyacetone phosphate (acyl-DHAP) to alkyldihydroxyacetone phosphate (alkyl-DHAP) by the enzyme alkyldihydroxyacetone phosphate synthase (ADPS, alternately referred to as AGPS). Recently, elevated levels of ADPS have been found in human cancer cells and primary tumors which lead to increased levels of oncogenic signaling lipids.

References: Benjamin, D.I.; Cozzo, A. et al. (2013) "Ether lipid generating enzyme AGPS alters the balance of structural and signaling lipids to fuel cancer pathogenicity." Proc. Natl. Acad. Sci. USA 110: 14912-7

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

