

Biotin-Phosphatidylethanol (12:0/18:1)

Catalog number: L-60B18

Molecular Formula: C₅₇H₁₀₇N₅O₁₁PS

MW: 1100.74

CAS#: n/a

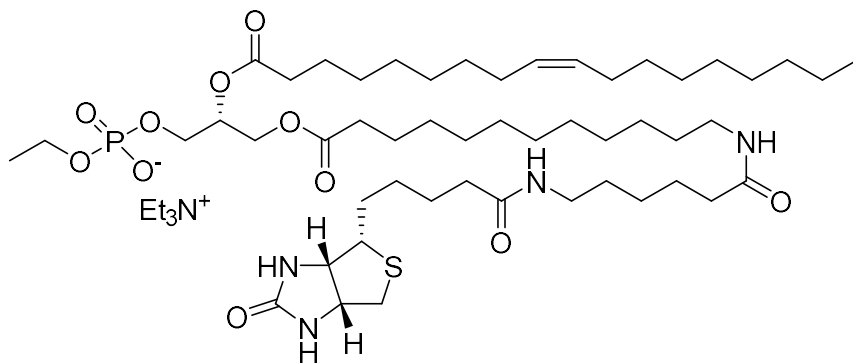
Alternate Name: Biotin-PEth

Solubility: Soluble in MeOH, EtOH (~1mg/mL).

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

Background: Phosphatidylethanol (PEth) is formed primarily in the liver by transphosphatidylation of phosphatidylcholine (PC) by phospholipase D. PEth is associated with lipoprotein particles VLDL and HDL, transferred between lipoproteins, and PEth-lipoprotein complexes may have a protective effect against atherogenesis by promoting VEGF secretion by SMC and endothelium. Most PEth (about 75%) is incorporated into erythrocyte membranes, and is the longest-lived circulating EtOH metabolite yet identified.

References: 1) Liisanantti MK, Savolainen MJ (2005) Phosphatidylethanol in high density lipoproteins increases the vascular endothelial growth factor in smooth muscle cells. *Atherosclerosis* 180: 263-269
2) Varga A, Hansson P, Johnson G, Alling C (2000) Normalization rate and cellular localization of phosphatidylethanol in whole blood from chronic alcoholics. *Clin Chim Acta* 299: 141-150.



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.

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