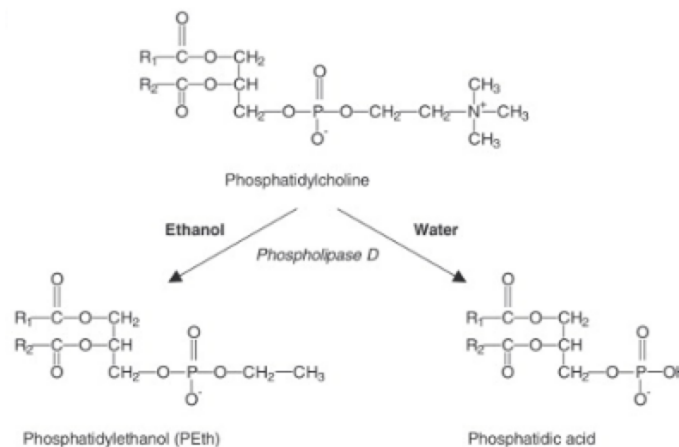


Phosphatidylethanol (PEth) 16:0/18:1 Calibrator curve in blood

Article number: 50-1011

Introducing new phosphatidylethanol (PEth) reference material for clinical diagnostic & forensic toxicology testing applications by LC-MS/MS

Background: PEth, or phosphatidylethanol, is a group of phospholipids formed only in the presence of ethanol from the action of phospholipase D. These direct biomarkers demonstrate high sensitivity appropriate for determining moderate to heavy alcohol consumption. The super-sensitivity and specificity of blood PEth over other alcohol biomarkers for determining alcohol consumption has resulted in a wide use and recommendation in the EU and US as a confirmatory test for recent drinking.



Our redhot certified spiking solutions are manufactured using validated processes that ensure the highest level of accuracy for critical LC-MS/MS application from TDM, diagnostic, research, and clinical chemistry.

Quantity: ready in blood 0, 0.02, 0.05, 0.1, 0.2, 0.5, 1.0, μM , seven vials in a kit

Storage: Long term storage at -20° , Shelf life: 18 months from production. (Expiration date on the vial.)

Short term storage at room temperature <2 days.

Freeze thawing cycles maximum 3 times.

Application note: For use as calibrator (standard curve) in LC-MS/MS applications for the qualitative and quantitative analysis of PEth-16:0/18:1.

Important Safety Notes: The pharmacological and toxicological properties of this product have not been fully investigated. Use general laboratory practice and caution in the use and handling of this product. This product must not be used in humans.

References:

1. Gustavsson L, Alling C. Formation of phosphatidylethanol in rat brain by phospholipase D. *Biochem Biophys Res Com* 1987, 142(3):958-63.
2. Helander A. and Zheng Y. Molecular Species of the Alcohol Biomarker Phosphatidylethanol in Human Blood Measured by LC-MS. *Clinical Chemistry* 2009, 55(7):1395-1405.
3. Gnann H, Engelmann C, Skopp G, Winkler M, Auwärter V, Dresen S, Ferreirós N, Wurst FM, Weinmann W. Identification of 48 homologues of phosphatidylethanol in blood by LC-ESI-MS/MS. *Anal Bioanal Chem* 2010, 396(7):2415-23.