# PRODUCT INFORMATION



## O-Phosphoethanolamine

Item No. 34636

CAS Registry No.: 1071-23-4

Formal Name: 2-amino-ethanol 1-(dihydrogen phosphate) Synonyms: O-Phosphorylethanolamine, NSC 254167

MF: C<sub>2</sub>H<sub>8</sub>NO<sub>4</sub>P FW: 141.1 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### **Laboratory Procedures**

O-Phosphoethanolamine is supplied as a solid. Aqueous solutions of O-phosphoethanolamine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of O-phosphoethanolamine in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

## Description

O-Phosphoethanolamine is an endogenous phospholipid metabolite. It is also a precursor in the biosynthesis of phosphatidylethanolamines in the endoplasmic reticulum. O-Phosphoethanolamine is also incorporated into lipid A, a component of LPS.2 It decreases disease severity in a mouse model of cerulein-induced acute pancreatitis.<sup>3</sup> Levels of O-phosphoethanolamine are decreased in postmortem amygdala from patients with Parkinson's disease.4

#### References

- 1. Podo, F. Tumour phospholipid metabolism. NMR Biomed. 12(7), 413-349 (1999).
- 2. Samantha, A. and Vrielink, A. Lipid A phosphoethanolamine transferase: Regulation, structure and immune response. J. Mol. Biol. 432(18), 5184-5196 (2020).
- 3. Sakai, A., Nishiumi, S., Shiomi, Y., et al. Metabolomic analysis to discover candidate therapeutic agents against acute pancreatitis. Arch. Biochem. Biophys. 522(2), 107-120 (2012).
- Kish, S.J., Rajput, A., Gilbert, J., et al. Elevated y-aminobutyric acid level in striatal but not extrastriatal brain regions in Parkinson's disease: Correlation with striatal dopamine loss. Ann. Neurol. 20(1), 26-31 (1986).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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