

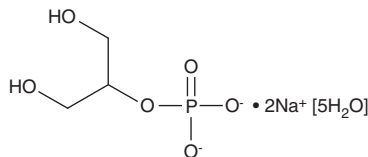
# PRODUCT INFORMATION



## β-Glycerophosphate (sodium salt hydrate)

Item No. 38367

**CAS Registry No.:** 13408-09-8  
**Formal Name:** 1,2,3-propanetriol, 2-(dihydrogen phosphate), disodium salt, pentahydrate  
**Synonym:** Glycerol 2-Phosphate  
**MF:** C<sub>3</sub>H<sub>7</sub>O<sub>6</sub>P • 2Na [5H<sub>2</sub>O]  
**FW:** 306.1  
**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

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

### Description

β-Glycerophosphate is an inhibitor of alkaline phosphatase (ALP).<sup>1</sup> It decreases ALP activity and promotes bone mineralization in chick osteoblasts when used at concentrations of 10 and 20 mM. β-Glycerophosphate (10 mM) induces calcification of cultured bovine vascular smooth muscle cells (BVSMCs) in an ALP-dependent manner.<sup>2</sup>

### References

1. hung, C.H., Golub, E.E., Forbes, E., *et al.* Mechanism of action on β-glycerophosphate on bone cell mineralization. *Calcif. Tissue Int.* **51(4)**, 305-311 (1992).
2. Shioi, A., Nishizawa, Y., Jono, S., *et al.* β-Glycerophosphate accelerates calcification in cultured bovine vascular smooth muscle cells. *Arterioscler. Thromb. Vasc. Biol.* **15(11)**, 2003-2009 (1995).

#### WARNING

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

#### SAFETY DATA

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.

#### WARRANTY AND LIMITATION OF REMEDY

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