

**Sodium  
Orthovanadate  
(Vanadate)**



1-800-632-7799  
info@neb.com  
www.neb.com



P0758S 009160319031

**P0758S**

**1 ml Lot: 0091603 Exp: 3/19**

**100 mM Store at -20°C**

**Description:** Sodium Orthovanadate (Vanadate,  $\text{Na}_3\text{VO}_4$ ) is a commonly used general inhibitor for protein phosphotyrosyl phosphatases (PTPs). It is a competitive inhibitor. The inhibition by Vanadate is completely reversible upon the addition of EDTA or by dilution. Vanadate has been activated for maximal inhibition of PTPs following the procedure described by J. A. Gordon (1).

**Vanadate has been fully activated**

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The PTP activities are conveniently separable from the protein phosphoserine and phosphothreonine phosphatase (PSP) activities inhibited by Fluoride (NEB #P0759) and EDTA. Routinely Vanadate is used to preserve the protein tyrosyl phosphorylation state in cells, cell lysates, and protein tyrosine kinase assays (1,2).

Supplied in: Sterile purified water adjusted to pH 10.0 (1,2).

**Molecular Weight:** 183.9 daltons

**Purity:** > 90% pure

**Suggested Working Concentration:** 1–10 mM

**Notes on Use:** Common buffer components such as EDTA and reducing agents may interact with Vanadate, affecting its potency (2).

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**References:**

1. Gordon, J. A. (1991) *Methods in Enzymology* 201, 477–482.
2. Huyer, G. et al. (1997) *J. Biol. Chem.* 272, 843–851.



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**References:**

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