
Sodium Orthovanadate (Vanadate); Activated, Ready-to-Use Solution

Part No. ActVO-4 (200 mM). Volumes: 6 ml, 12 ml, 20 ml, 30 ml, 50 ml



Synonyms: Sodium Vanadate, Vanadate

Specifications:

Chemical Formula: Na_3VO_4

CAS Number: 13721-39-6

Purity of starting material: >99%

Molecular Weight: 183.9

Solubility in water: soluble

Provided as: 200 mM aqueous solution

Inhibitor of tyrosyl-phosphatases, alkaline phosphatases and Na,K,ATPases, including MDR (multidrug resistance receptor; P-glycoprotein)

Sodium orthovanadate is a potent inhibitor of tyrosine phosphatases, alkaline phosphatases and ATPases by operating as a phosphate analogue. Part ActVO-4 has undergone an activation-depolymerization preparation that involves pH adjustment, heating until colorless at equilibrium at pH 10.0, and filtering^{1,2}.

Activated sodium orthovanadate is added directly to cell lysis buffers to inhibit tyrosyl-phosphatases and preserve protein phosphorylation.

Directions: Provided as a 200 mM solution. Use at 1-10 mM. Dispense directly into cell lysates. (After defrosting, vortex to solubilize crystals).

References

1. Gordon, J.: *Methods Enzymol.* (1991) 201, 477-482.
2. Huyer, G., et al.: *J. Biol. Chem.* (1997) 272, 843-851.

Safety: Harmful. Avoid all contact and inhalation.

Shipping: Ambient temperature

Storage: -20°C upon arrival.