**PRODUCT INFORMATION**

**bpV(HOpic) (potassium salt, technical grade)**

*Item No. 15438*

**CAS Registry No.:** 722494-26-0  
**Formal Name:** (5-hydroxy-2-pyridinecarboxylato-κN¹,κO²) ooxidoperoxy-vanadate(2-), dipotassium  
**Synonym:** Bisperoxovanadium(HOpic)  
**MF:** C₆H₄NO₈V • 2K  
**FW:** 347.2  
**Purity:** ≥80%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

**Special Conditions:** Product not stable in water. Decomposition starts immediately after being dissolved. Rate of decomposition is slower in dry DMSO.

**Laboratory Procedures**

bpV(HOpic) (potassium salt, technical grade) is supplied as a crystalline solid. A stock solution may be made by dissolving the bpV(HOpic) (potassium salt, technical grade) in the solvent of choice. bpV(HOpic) (potassium salt, technical grade) is soluble in organic solvents such as DMSO and water. The solubility of bpV(HOpic) (potassium salt, technical grade) in these solvents is approximately 4 mg/ml.

**Description**

bpV(HOpic) is a bisperoxovanadium (bpV) compound that inhibits several different protein tyrosine phosphatases (PTPs), with selectivity for PTEN (IC₅₀ = 14 nM). It also inhibits the vascular endothelial PTP, PTP-B (IC₅₀ = 4.9 μM), and PTP-1βB (IC₅₀ = 25.3 μM). At 15 μM, bpV(HOpic) has been shown to protect against stimulated ischemia-reperfusion injury in vitro by decreasing apoptosis and improving cell viability through the upregulation of the PI3K/Akt/eNOS/ERK prosurvival pathway.

**References**