

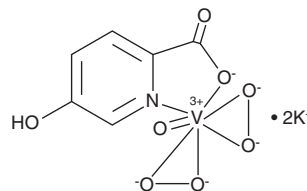
PRODUCT INFORMATION



bpV(HOpic) (potassium salt)

Item No. 14433

CAS Registry No.: 722494-26-0
Formal Name: (5-hydroxy-2-pyridinecarboxylato-κN¹,κO²)
oxodiperoxy-vanadate(2-), dipotassium
Synonym: Bisperoxovanadium(HOpic)
MF: C₆H₄NO₈V • 2K
FW: 347.2
Purity: ≥95%
Supplied as: A crystalline 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

bpV(HOpic) (potassium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the bpV(HOpic) (potassium salt) in the solvent of choice. bpV(HOpic) (potassium salt) is soluble in organic solvents such as DMSO, which should be purged with an inert gas. It is also soluble in water. The solubility of bpV(HOpic) (potassium salt) in DMSO and water is approximately 4 mg/ml. bpV(HOpic) (potassium salt) is not stable in water and begins to decompose immediately after dissolving. The rate of decomposition is slower in dry DMSO.

Description

bpV(HOpic) is a bisperoxovanadium (bpV) compound that inhibits several different protein tyrosine phosphatases (PTPs), with selectivity for PTEN (IC₅₀ = 14 nM).¹ It also inhibits the vascular endothelial PTP, PTP-β (IC₅₀ = 4.9 μM), and PTP-1βB (IC₅₀ = 25.3 μM).¹ 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.²

References

- Schmid, A.C., Byrne, R.D., Vilar, R., *et al.* Bisperoxovanadium compounds are potent PTEN inhibitors. *FEBS Lett.* **566(1-3)**, 35-38 (2004).
- Keyes, K.T., Xu, J., Long, B., *et al.* Pharmacological inhibition of PTEN limits myocardial infarct size and improves left ventricular function postinfarction. *Am. J. Physiol. Heart Circ. Physiol.* **298(4)**, H1198-H1208 (2010).

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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