

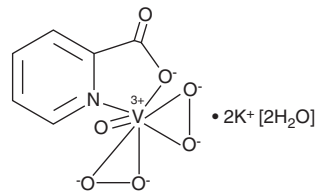
PRODUCT INFORMATION



bpV(pic) (potassium hydrate)

Item No. 14434

CAS Registry No.: 148556-27-8
Formal Name: (PB-7-23-111'14)-oxodiperoxy(2-pyridinecarboxylato- κ N¹, κ O²)-vanadate(2-), dipotassium, dihydrate
Synonym: Bisperoxovanadium(pic)
MF: C₆H₄NO₇V • 2K [2H₂O]
FW: 367.3
Purity: ≥96%
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(pic) (potassium hydrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the bpV(pic) (potassium hydrate) in the solvent of choice, which should be purged with an inert gas. bpV(pic) (potassium hydrate) is soluble in DMSO.

Description

bpV(pic) is a bisperoxovanadium (bpV) compound that inhibits several different protein tyrosine phosphatases (PTPs), with selectivity for PTEN (IC₅₀ = 31 nM).¹ It also inhibits the vascular endothelial PTP, PTP- β (IC₅₀ = 12.7 μ M), and PTP-1 β B (IC₅₀ = 61 μ M).¹ bpV(pic) is also known to be an insulin mimetic capable of activating the insulin receptor kinase of cultured hepatoma cells, stimulating lipogenesis in adipocytes, and inhibiting the dephosphorylation of autophosphorylated insulin receptors and epidermal growth factor receptors of rat liver endosomes.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).
- Posner, B.I., Faure, R., Burgess, J.W., *et al.* Peroxovanadium compounds. A new class of potent phosphotyrosine phosphatase inhibitors which are insulin mimetics. *J. Biol. Chem.* **269(6)**, 4596-4604 (1994).

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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