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## DATASHEET

bpV(pic)

### Product overview

<b>Name</b>	bpV(pic)
<b>Cat No</b>	HB0147
<b>Biological action</b>	Inhibitor
<b>Purity</b>	>90%
<b>Description</b>	Potent PTP inhibitor

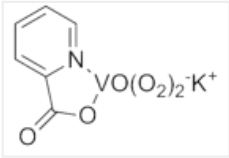
### Biological Data

<b>Biological description</b>	Potent protein phosphotyrosine phosphatase (PTP) inhibitor (IC <sub>50</sub> values are 12.7 and 61 μM for PTP-β and PTP-1B respectively). Also inhibits phosphatase and tensin homologue (PTEN) (IC <sub>50</sub> = 31 nM) and activates insulin-receptor kinase (IRK). Displays cardioprotective and insulin-mimetic properties.
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### Solubility & Handling

<b>Storage instructions</b>	+4 °C
<b>Solubility overview</b>	Soluble in water or DMSO
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

### Chemical Data

<b>Chemical name</b>	Dipotassium bisperoxo (picolinato)oxovanadate (V)
<b>Molecular Weight</b>	367.28
<b>Chemical structure</b>	
<b>Molecular Formula</b>	K <sub>2</sub> [VO(O <sub>2</sub> ) <sub>2</sub> C <sub>6</sub> H <sub>4</sub> NO <sub>2</sub> ].2H <sub>2</sub> O
<b>CAS Number</b>	148556-27-8
<b>PubChem identifier</b>	16760324
<b>SMILES</b>	C1=CC=NC(=C1)C(=O)[O-].O.O.[OH-].OO.OO.[K+].[K+].[V]

### References

#### Peroxovanadium compounds. A new class of potent phosphotyrosine phosphatase inhibitors which are insulin mimetics.

Posner BI *et al* (1994) J Biol Chem 269(6)

**PubMedID** [8308031](#)

#### Bisperoxovanadium compounds are potent PTEN inhibitors.

Schmid AC *et al* (2004) FEBS Lett 566(1-3)

**PubMedID** [15147864](#)

**Early signaling events triggered by peroxovanadium [bpV(phen)] are insulin receptor kinase (IRK)-dependent: specificity of inhibition of IRK-associated protein tyrosine phosphatase(s) by bpV(phen).**

Band CJ *et al* (1997) Mol Endocrinol 11(13)

**PubMedID** [9415395](#)

**Effects of bpV(pic) and bpV(phen) on H9c2 cardiomyoblasts during both hypoxia/reoxygenation and H<sub>2</sub>O<sub>2</sub>-induced injuries.**

Tian Y *et al* (2012) Mol Med Rep 5(3)

**PubMedID** [22200881](#)

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