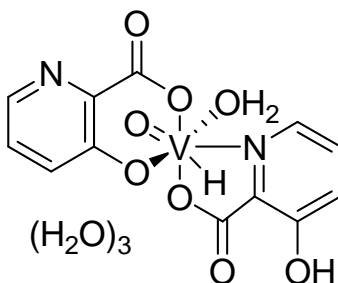


Product Name: VO-OHpic (PTEN inhibitor)

Product Number: B-0351



Molecular Formula: C₁₂H₁₀N₂O₈V + 3H₂O **MW:** 415.2 **CAS:** 476310-60-8

Solubility: 10 mg/mL DMSO

Storage: -20 °C

Field of Interest: The vanadium complex VO-OHpic is a potent, reversible, allosteric inhibitor of phosphatase and tensin homologue deleted on chromosome 10 (PTEN) which hydrolyzes the 3-phosphate from phosphatidylinositol 3,4,5-trisphosphate (PIP₃). PIP₃, formed from PI(4,5)P₂ through phosphorylation by PI 3-kinase, activates numerous signaling pathways resulting in cell proliferation, growth, survival, glucose transport and protein synthesis. VO-OHpic is selective for PTEN (IC₅₀~35 nM) compared with other cysteine-based phosphatases (PTPβ, SAC, MTM, & SopB, IC₅₀>4 μM). Treatment of insulin-stimulated NIH 3T3 and L1 fibroblasts caused an increase in Akt-phosphorylation indicating inhibition of PTEN *in vivo*.

References: 1) Rosivatz, E. *et al.* "A small-molecule inhibitor for phosphatase and tensin homologue deleted on chromosome 10 (PTEN) *ACS Chem Biol.* **2006**, *1*, 780–790. 2) Mak, L.H. *et al.* "Characterisation of the PTEN inhibitor VO-OHpic" *J. Chem. Biol.* **2010**, *3*, 157-163.

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. VO-OHpic is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.