Phenylarsine oxide

Product Number P3075
Store at Room Temperature

Product Description
CAS Number: 637-03-6
Molecular Formula: C₆H₅AsO
Molecular Weight: 168.0
Synonyms: Oxophenylarsine, PAO, Arzene

Phenylarsine oxide is a tyrosine phosphatase inhibitor, which does not affect tyrosine kinase activity.¹ It reacts with vicinal -SH groups² and has also been proposed to react with vicinal -SH/-OH and -SH/-CO₂H groups.³ Phenylarsine oxide has been shown to affect human endothelial cell permeability through induction of proteolysis of occludin.⁴ It can also elevate intracellular calcium levels in thymocytes and inhibit Ca²⁺-dependent ATPase activity in both thymocytes and sarcoplasmic reticulum from skeletal muscle.⁵ In addition, phenylarsine oxide has been shown to inhibit internalization of cell surface receptors in studies on mammalian brain.⁶

A procedure for the use of phenylarsine oxide in affinity chromatography for protein identification has been published.⁷

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in DMSO (50 mg/ml), applying heat as needed. It also has been reported as soluble in 50:50 DMSO:1 M HCl (3.0 mg/ml).

References