

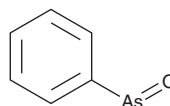
# PRODUCT INFORMATION



## Phenylarsine Oxide

Item No. 35525

CAS Registry No.: 637-03-6  
Formal Name: oxophenyl-arsine  
Synonym: NSC 42470  
MF: C<sub>6</sub>H<sub>5</sub>AsO  
FW: 168.0  
Purity: ≥95%  
UV/Vis.: λ<sub>max</sub>: 221 nm  
Supplied as: A 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

Phenylarsine oxide is supplied as a solid. A stock solution may be made by dissolving the phenylarsine oxide in the solvent of choice, which should be purged with an inert gas. Phenylarsine oxide is soluble in acetonitrile.

### Description

Phenylarsine oxide is an organoarsenic compound.<sup>1</sup> It inhibits insulin-induced protein phosphatase 1 (PP1) activity and glucose transporter 4 (Glut4) translocation in rat adipocytes when used at a concentration of 5 μM. Phenylarsine oxide completely inhibits insulin-induced PI3K activation and glucose transport in 3T3-L1 adipocytes when used at concentrations of 30 and 50 μM, respectively.<sup>2</sup> It inhibits potassium chloride-induced exocytosis and induces mitochondrial depolarization in isolated rat brain synaptosomes.<sup>3</sup> Phenylarsine oxide (0.3 and 1 mg/kg, i.p.) reduces LPS-induced neutrophil infiltration in bronchoalveolar lavage fluid (BALF) and carrageenan-induced paw edema in rats.<sup>4</sup>

### References

1. Begum, N. Phenylarsine oxide inhibits insulin-stimulated protein phosphatase 1 activity and GLUT-4 translocation. *Am. J. Physiol.* **267**(1 Pt. 1), E14-E23 (1994).
2. Han, Y.P. and Kohanski, R.A. Phenylarsine oxide inhibits insulin activation of phosphatidylinositol 3'-kinase. *Biochem. Biophys. Res. Commun.* **239**(1), 316-321 (1997).
3. Tarasenko, A.S., Kostrzhevskaya, O.G., Storchak, L.G., et al. Phenylarsine oxide is able to dissipate synaptic vesicle acidic pool. *Neurochem. Int.* **46**(7), 541-550 (2005).
4. Roussin, A., Cabec, V.L., Lonchamp, M., et al. Neutrophil-associated inflammatory responses in rats are inhibited by phenylarsine oxide. *Eur. J. Pharmacol.* **322**(1), 91-96 (1997).

#### 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.

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