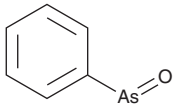
PRODUCT INFORMATION

Phenylarsine Oxide

Item No. 35525

CAS Registry No.:	637-03-6
Formal Name:	oxophenyl-arsine
Synonym:	NSC 42470
MF:	C_6H_5AsO
FW:	168.0
Purity:	≥95%
UV/Vis.:	λ_{max}: 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.[1] 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.[2] It inhibits potassium chloride-induced exocytosis and induces mitochondrial depolarization in isolated rat brain synaptosomes.[3] 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.[4]

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., Kostrzhevska, 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., Lonchampt, M., *et al.* Neutrophil-associated inflammatory responses in rats are inhibited by phenylarsine oxide. *Eur. J. Pharmacol.* **322(1)**, 91-96 (1997).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM