LKT Laboratories, Inc.

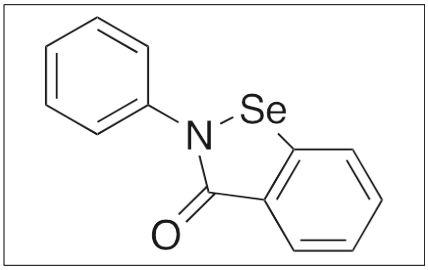
Ebselen

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID E0073
CAS No. 60940-34-3
Chemical Name

Synonym 2-Phenyl-1,2-benzisoselenazolin-3-one



Formula $C_{13}H_9NOSe$
Formula Wt. 274.18
Melting Point 180-181°C
Purity ≥98%
Solubility Soluble in DMSO.

Bulk quanitites available upon request

Product ID	Size
E0073	5 mg
E0073	25 mg

Store Temp -20°C
Ship Temp Ambient

Description Ebselen is a synthetic glutathione peroxidase mimetic that reacts with cysteine residues; it exhibits antimicrobial, antibacterial, anti-diabetic, and antioxidative activities. Ebselen increases ROS and mitochondrial membrane potential, inhibiting GDH function in vitro. Additionally, ebselen inhibits yeast sporulation and binds the *Mycobacterium* Ag85 complex, preventing outer membrane synthesis. In diabetic rats, this compound prevents hyperglycemia, decreases glucose levels, Hb1Ac, and oxidative stress, and increases ß-cell mass.

References

Azad GK, Singh V, Mandal P, et al. Ebselen induces reactive oxygen species (ROS)-mediated cytotoxicity in Saccharomyces cerevisiae with inhibition of glutamate dehydrogenase being a target. FEBS Open Bio. 2014 Jan 6;4:77-89. PMID: 24490132.

Favrot L, Grzegorzewicz AE, Lajiness DH, et al. Mechanism of inhibition of Mycobacterium tuberculosis antigen 85 by ebselen. Nat Commun. 2013;4:2748. PMID: 24193546.

Mahadevan J, Parazzoli S, Oseid E, et al. Ebselen treatment prevents islet apoptosis, maintains intranuclear Pdx-1 and MafA levels, and preserves ß-cell mass and function in ZDF rats. Diabetes. 2013 Oct;62(10):3582-8. PMID: 23801580.