PRODUCT INFORMATION



Ebselen

Item No. 70530

CAS Registry No.: 60940-34-3

Formal Name: 2-phenyl-1,2-benzisoselenazol-3(2H)-one

MF: C₁₃H₉NOSe FW: 274.2

Purity: ≥99% UV/Vis.: λ_{max} : 230, 263, 330 nm Supplied as: A crystalline 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

Ebselen is supplied as a crystalline solid. A stock solution may be made by dissolving the ebselen in the solvent of choice, which should be purged with an inert gas. Ebselen is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ebselen in these solvents is approximately 10 and 20 mg/ml, respectively.

Description

Ebselen acts as a glutathione peroxidase mimic and is an excellent scavenger of peroxynitrite with a rate constant of $2 \times 10^6 \,\mathrm{M}^{-1} \mathrm{s}^{-1}$. The glutathione peroxidase-like activity of ebselen inhibits cyclooxygenase and lipoxygenases at micromolar concentrations.^{2,3}

References

- 1. Masumoto, H., Kissner, R., Koppenol, W.H., et al. Kinetic study of the reaction of ebselen with peroxynitrite. FEBS Lett. 398(2-3), 179-182 (1996).
- 2. Parnham, M.J. and Graf, E. Seleno-organic compounds and the therapy of hydroperoxide-linked pathological conditions. Biochem. Pharmacol. 36(19), 3095-3102 (1987).
- 3. Parnham, M.J. and Kindt, S. A novel biologically active seleno-organic compound III. Effects of PZ 51 (ebselen) on glutathione peroxidase and secretory activities of mouse macrophages. Biochem. Pharmacol. 33(20), 3247-3250 (1984).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/03/2023

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