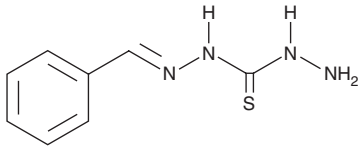
PRODUCT INFORMATION

DKI5

Item No. 46622

CAS Registry No.: 1101130-96-4
Formal Name: 2E-(phenylmethylene)-carbonothioic dihydrazide
MF: $C_8H_{10}N_4S$
FW: 194.3
Purity: ≥95%
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

DKI5 is supplied as a solid. A stock solution may be made by dissolving the DKI5 in the solvent of choice, which should be purged with an inert gas. DKI5 is slightly soluble (0.1-1 mg/ml) in DMSO.

Description

DKI5 is an inhibitor of lipoxygenase-1 (LO-1; IC_{50} = 22.5 µM for the soybean enzyme).[1] It inhibits lipid peroxidation induced by AAPH (Item No. 82235) in a cell-free assay when used at a concentration of 100 µM. DKI5 also inhibits urease from *S. pasteurii* (IC_{50} = 3.57 µM) and the hydrolysis of urea in *S. pasteurii*.[2]

References

1. Georgiou, N., Chontzopoulou, E., Cheilari, A., *et al*. Thiocarbohydrazone and chalcone-derived 3,4-dihydropyrimidinethione as lipid peroxidation and soybean lipoxygenase inhibitors. *ACS Omega* **8(13)**, 11966-11977 (2023).
2. Tabor, W., Katsogiannou, A., Karta, D., *et al*. Exploration of thiourea-based scaffolds for the construction of bacterial ureases inhibitors. *ACS Omega* **8(31)**, 28783-28796 (2023).

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.

WARRANTY AND LIMITATION OF REMEDY
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.

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