

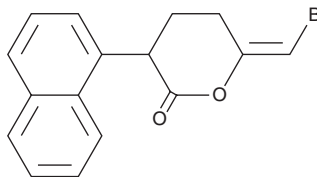
PRODUCT INFORMATION



Bromo-enol lactone

Item No. 70700

CAS Registry No.: 88070-98-8
Formal Name: 6E-(bromomethylene)tetrahydro-3-(1-naphthalenyl)-2H-pyran-2-one
Synonyms: BEL, Haloenol lactone, HELSS
MF: C₁₆H₁₃BrO₂
FW: 317.2
Purity: ≥95%
Supplied as: A crystalline solid
Melting Point: 103-106°C
UV/Vis.: λ_{max}: 224 nm
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

BEL is supplied as a crystalline solid. A stock solution may be made by dissolving the BEL in an organic solvent purged with an inert gas. BEL is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of BEL in these solvents is approximately 5, 25, and 50 mg/ml, respectively.

Further dilutions of the BEL solutions into aqueous buffers should be made just prior to performing experiments. Store aqueous solutions of BEL on ice and use within 12 hours of preparation. Although the aqueous solutions of BEL may be stable for more than 12 hours, we strongly recommend using a fresh preparation each day.

Description

BEL is a selective, potent, irreversible, mechanism-based inhibitor of myocardial cytosolic calcium-independent phospholipase A₂ (iPLA₂) with a K_i value of 180 nM.¹ BEL also inhibits macrophage iPLA₂ in a concentration-dependent manner with an IC₅₀ value of 60 nM and is an effective enzyme-activated irreversible inhibitor of chymotrypsin (K_i = 636 nM).^{2,3}

References

1. Hazen, S.L., Zupan, L.A., Weiss, R.H., *et al.* Suicide inhibition of canine myocardial cytosolic calcium-independent phospholipase A₂. *J. Biol. Chem.* **266**, 7227-7232 (1991).
2. Ackermann, E.J., Conde-Frieboes, K., and Dennis, E.A. Inhibition of macrophage Ca²⁺-independent phospholipase A₂ by bromoenol lactone and trifluoromethyl ketones. *J. Biol. Chem.* **270**, 445-450 (1995).
3. Daniels, S.B., Cooney, E., Sofia, M.J., *et al.* Haloenol Lactones. Potent enzyme-activated irreversible inhibitors for α-chymotrypsin. *J. Biol. Chem.* **258**, 15046-15053 (1983).

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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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