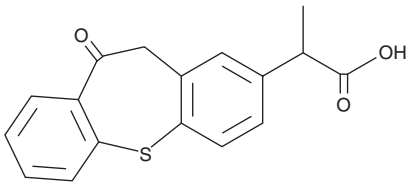
PRODUCT INFORMATION

Zaltoprofen

Item No. 14662

CAS Registry No.: 74711-43-6
Formal Name: 10,11-dihydro-a-methyl-10-oxo-dibenzo[*b*,*f*]thiepin-2-acetic acid
Synonyms: CN 100, Soleton
MF: $C_{17}H_{14}O_3S$
FW: 298.4
Purity: ≥98%
UV/Vis.: λ_{max}: 228, 329 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

Zaltoprofen is supplied as a crystalline solid. A stock solution may be made by dissolving the zaltoprofen in the solvent of choice, which should be purged with an inert gas. Zaltoprofen is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of zaltoprofen in these solvents is approximately 11, 16, and 25 mg/ml, respectively.

Zaltoprofen is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, zaltoprofen should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Zaltoprofen has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Zaltoprofen is a cyclooxygenase (COX) inhibitor that displays slight preferential inhibition for COX-2 (IC_{50}s = 1.3 and 0.34 µM for COX-1 and COX-2, respectively).[1] Independent of COX inhibition, zaltoprofen has also been reported to inhibit bradykinin-induced nociceptive responses by blocking the activation of protein kinase C.[2]

References

1. Kawai, S., Nishida, S., Kato, M., et al. Comparison of cyclooxygenase-1 and -2 inhibitory activities of various nonsteroidal anti-inflammatory drugs using human platelets and synovial cells. Eur. J. Pharmacol. 347(1), 87-94 (1998).
2. Kohno, T. Zaltoprofen inhibits bradykinin-mediated enhancement of glutamate receptor activity in substantia gelatinosa neurons. Anesth. Analg. 113(2), 412-416 (2011).

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