PRODUCT INFORMATION

Tenidap
Item No. 17413

CAS Registry No.: 120210-48-2
Formal Name: (3Z)-5-chloro-2,3-dihydro-3-(hydroxy-2-thienylmethylene)-2-oxo-1H-indole-1-carboxamide
Synonym: CP 66,248
MF: C14H9ClN2O3S
FW: 320.8
Purity: ≥98%
UV/Vis.: λmax: 219, 273, 370 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

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

Description

Tenidap is a COX-1 selective non-steroidal anti-inflammatory drug (IC50s = <0.03, 1.2, and >30 μM for COX-1, COX-2, and 5-lipoxygenase (5-LO), respectively). It has anti-inflammatory and antirheumatic properties. In vitro, it inhibits prostaglandin D2 (PGD2), leukotriene B4 (LTB4), and prostaglandin E2 (PGE2) synthesis (IC50s = 0.02, 18, and 32 μM, respectively). Tenidap also reversibly and dose-dependently activates hKir2.3 channels in CHO cells (EC50 = 402 nM) and inhibits fatty acid amide hydrolase (FAAH) activity. A formulation containing tenidap was not approved for rheumatoid and osteoarthritis by the FDA due to adverse effects, including bone mineralization loss, as well as liver and kidney toxicity.

References