

Bufalin

Catalog No: tcsc3694



Available Sizes

Size: 5mg

Size: 10mg



Specifications

CAS No:

465-21-4

Formula:

$C_{24}H_{34}O_4$

Pathway:

Others

Target:

Others

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 31 mg/mL (80.20 mM)

Observed Molecular Weight:

386.52

Product Description

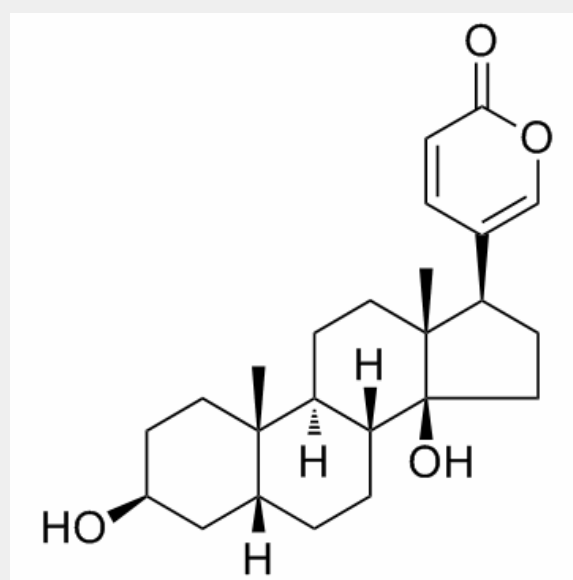
Bufalin a major digoxin-like immunoreactive component of the Chinese medicine Chan Su; has been shown to exert a potential for anticancer activity against various human cancer cell lines in vitro.

IC50 value:

Target: Anticancer natural compound

in vitro: Bufalin remarkably inhibited growth in human gallbladder cancer cells by decreasing cell proliferation, inducing cell cycle arrest and apoptosis in a dose-dependent manner. Bufalin also disrupted the mitochondrial membrane potential ($\Delta\Psi_m$) and regulated the expression of cell cycle and apoptosis regulatory molecules. Activation of caspase-9 and the subsequent activation of caspase-3 indicated that bufalin may be inducing mitochondria apoptosis pathways [1]. bufalin suppressed the protein levels associated with DNA damage and repair, such as a DNA dependent serine/threonine protein kinase (DNA-PK), DNA repair proteins breast cancer 1, early onset (BRCA1), 14-3-3 σ (an important checkpoint keeper of DDR), mediator of DNA damage checkpoint 1 (MDC1), O6-ethylguanine-DNA methyltransferase (MGMT) and p53 (tumor suppressor protein) [2]. TNF- α significantly increased p65 translocation into nucleus (P

in vivo: bufalin (0.3 and 0.6 mg/kg, i.p.) potently decreased carrageenan-induced paw edema. Bufalin down regulated the expression levels of nitric oxide synthase (iNOS), cyclooxygenase-2 (COX-2), interleukin-1 β (IL-1 β), interleukin-6 (IL-6), and tumor necrosis factor- α (TNF- α) during these treatments [5].



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