



Homoharringtonine

Catalog No: tcsc2872



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

26833-87-4

Formula:

 $C_{29}H_{39}NO_{9}$

Pathway:

JAK/STAT Signaling;Stem Cell/Wnt

Target:

STAT;STAT

Purity / Grade:

>98%

Solubility:

DMSO : \geq 50 mg/mL (91.64 mM)

Alternative Names:

Omacetaxine mepesuccinate; HHT

Observed Molecular Weight:

545.62

Product Description

Homoharringtonine is a cytotoxic alkaloid, induces apoptosis and inhibits **STAT3** via IL-6/JAK1/STAT3 signal pathway in Gefitinib-resistant lung cancer cells.



IC50 & Target: STAT3^[1]

In Vitro: Homoharringtonine inhibits IL-6-induced STAT3 phosphorylation in a dose- and time-dependent manner. Homoharringtonine (HHT) inhibits cells growth, cell viability and colony formation, as well as induced cell apoptosis through mitochondria pathway. The cytotoxicity of Homoharringtonine on human NSCLC cell lines is investigated, A549 (wild type EGFR) and NCI-H1975 (H1975, mutant EGFR with L858R and T790M), Gefitinib is used as a control. By MTT assay, Homoharringtonine has moderate cytotoxicity to A549 with an IC $_{50}$ of 3.7 μ M and H1975 cells are more sensitive to Homoharringtonine with an IC $_{50}$ of 0.7 μ M. Homoharringtonine inhibits the cell proliferation and growth of A549 cells and H1975 cells in a time- and dose-dependent manner through MTT assay. By trypan blue exclusion assay, Homoharringtonine rapidly reduces viable A549 and H1975 cells in a dose- and time-dependent manner. Homoharringtonine significantly inhibits the clonogenic ability of A549 and H1975 cells [1].

In Vivo: Homoharringtonine (10 mg/kg) efficiently represses tumor growth compared to vehicle control or Gefitinib (P[1].

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!