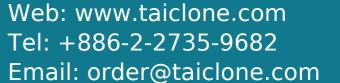




Genistein

Catalog No: tcsc1534

Available Sizes
Size: 1g
Size: 5g
Size: 10g
Specifications
CAS No: 446-72-0
Formula: $C_{15}^{H}_{10}^{O}_{5}$
Pathway: JAK/STAT Signaling;Protein Tyrosine Kinase/RTK;Autophagy
Target: EGFR;EGFR;Autophagy
Purity / Grade: >98%
Solubility: DMSO : ≥ 33 mg/mL (122.11 mM)
Alternative Names: NPI 031L
Observed Molecular Weight: 270.24
Product Description





Genistein, a soy isoflavone, is a multiple **tyrosine kinases** inhibitor which acts as a chemotherapeutic agent against different types of cancer, mainly by altering apoptosis, the cell cycle, and angiogenesis and inhibiting metastasis.

IC50 & Target: IC50: 0.7 μ g/mL (0.6 μ M) (EGFR)^[1]

In Vitro: Genistein inhibits serum-stimulated growth of MCF-7 and T47D ER $^+$ cells with IC $_{50}$ values of 7.6 and 8.7 μ g/mL by dye exclusion, respectively, and 8.7 and 10.6 μ g/mL by [3 H]thymidmne incorporation, respectively. These values are similar to the IC $_{50}$ values of 9.4 and 7 μ g/mL for MCF-7 and T47D ER $^+$ cells, respectively, obtained with the MTT assay. Additionally, Genistein at concentrations up to 20 μ g/mL does not alter MTT mitochondrial reduction when compared to control cells in an 8 h incubation period. Furthermore, neither biochanin A or daidzein are found to interfere with the MTT assay at IC $_{50}$ concentrations. Therefore, the MTT assay is valid for determining growth inhibition by Genistein at concentrations under 20 μ g/mL in the systems studied [1].

In Vivo: In the present study, the effective dose of morphine caused a significant decrease in testis weight of mice compared to Saline group (p=0.00). Moreover, testis weight are significantly increase in treated animals with Genistein and Genistein plus morphine in all doses in comparison with morphine group (p=0.028). Morphine caused a significant decrease in the testosterone, LH and FSH hormones compared to saline group (p=0.00). In addition, the testosterone, LH and FSH hormones increased significantly in Genistein (p[2]. Bisphenol A (BPA) treatment alone and combined with Genistein had no significant effect on the protein expression of LC3II and PPAR α in liver of STD- or HFD-fed rats (P>0.05; P>0.05). Significant decreasing of the protein expression of PPAR γ in liver is observed when Genistein is added to rats, compared to either HFD group or HFD-BPA group^[3].

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