

Fisetin quarterhydrate

Chemical Properties

CAS No. :

Formula: C₁₅H₁₀O₆.1/4H₂O

Molecular Weight:

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.

Biological Description

Description	Fisetin quarterhydrate, a natural flavonol present in numerous fruits and vegetables, exhibits benefits including antioxidant, anticancer, and neuroprotective effects.
Targets(IC50)	Others,PPAR,Sirtuin,TNF
In vitro	Fisetin quarterhydrate suppresses lipid accumulation and diminishes the expression of PPAR γ in 3T3-L1 cells. It inhibits the early stages of preadipocyte differentiation and induces the expression of Sirt1, further promoting Sirt1-mediated deacetylation of PPAR γ and FoxO1, enhancing the binding of Sirt1 to the PPAR γ promoter and repressing PPAR γ transcriptional activity, thereby inhibiting adipogenesis [1]. Fisetin quarterhydrate binds to tubulin, stabilizing microtubules more effectively than paclitaxel. In human prostate cancer cells, fisetin quarterhydrate treatment causes a pronounced upregulation of microtubule-associated proteins (MAP)-2 and -4, significantly inhibiting PCa cell proliferation, migration, and invasion. Nudc, a protein associated with microtubule motor dynein/dynactin complex regulating microtubule dynamics, is also downregulated with fisetin quarterhydrate treatment [2].
In vivo	Treatment with Fisetin quarterhydrate in mice exposed to UVB reduces proliferation and decreases the infiltration of inflammatory cells. This treatment also lowers levels of inflammatory mediators, such as COX-2, PGE2 and its receptors (EP1-EP4), and MPO activity. Moreover, Fisetin quarterhydrate reduces levels of pro-inflammatory cytokines, including TNF α , IL-1 β , and IL-6, in UVB-exposed skin. Additionally, this treatment diminishes markers of cellular proliferation and DNA damage, as evidenced by the increased expression of the proteins p53 and p21 [3].

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286

E_mail:info@targetmol.com

Address:34 Washington Street,Wellesley Hills,MA 02481