

Data Sheet

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Product Name
Cat. No.
PC-25873
CAS No.
1617-53-4
Molecular Formula
C₃₀H₁₈O₁₀
Molecular Weight
538.46

Solubility : 10 mM in DMSO

: VEGFR

Biological Activity

Target

Amentoflavone is a naturally occurring biflavonoid with anti-inflammatory and anti-tumor properties, an antiangiogenic bioactive molecule that binds VEGFs preventing the interaction and phosphorylation of VEGF receptor 1 and 2 (VEGFR-1,VEGFR-2).

Amentoflavone significantly inhibited GLI-1-mediated CRC cell proliferation, induced G1 phase arrest, and downregulated Cyclin D1/CDK4 expression, by targeting the GLI-1/IL-6/STAT3 signaling axis.

Amentoflavone inhibited endothelial cell migration and capillary-like tube formation induced by VEGF-A or placental growth factor 1 (PIGF-1) at low uM concentration.

Amentoflavone inhibited VEGF-A-induced chorioallantoic membrane neovascularization as well as tumor growth and associated neovascularization, as assessed in orthotropic melanoma and xenograft colon carcinoma models.

References

Gele T, et al. J Cell Mol Med. 2025 Oct;29(20):e70825.

Chen R, et al. Int Immunopharmacol. 2025 Nov 14;165:115450.

Fang YJ, et al. Biomed Pharmacother. 2025 Oct;191:118435.

Tarallo V, et al. J Biol Chem. 2011 Jun 3;286(22):19641-51.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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