

Product Name : Deguelin

Synonyms : Deguelin

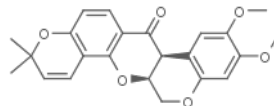
Cat No. : M18716

CAS Number : 522-17-8

Molecular Formula : C₂₃H₂₂O₆

Formula Weight : 394.42

Chemical Name : (7aS,13aS)-9,10-dimethoxy-3,3-dimethyl-13,13a-dihydro-3H-pyrano[2,3-c:6,5-f']dichromen-7(7aH)-one.



Description : Deguelin is a naturally occurring rotenoid, is known to be an Akt inhibitor and to have an anti-tumor effect on several cancers. Deguelin displays anti-cancer activity by inhibiting the growth of pre-cancerous and cancerous cells - particularly for lung cancer. So far the compound has shown no toxic effects on normal cells. However, high doses of deguelin are suspected of having negative effects on the heart, lungs and nerves. The molecular mechanisms include the induction of apoptosis, mediated through AKT/PKB signaling pathways in malignant and premalignant human bronchial epithelia (HBE) cells, with only minimal effects on normal HBE cells. Deguelin inhibits AKT by both Phosphoinositol-3-phosphate kinase (PI3K)-dependent and PI3K-independent pathways.

Pathway : GPCR/G Protein

Target : Histamine Receptor

Receptor : PI3K;Akt

Solubility : DMSO : 50 mg/mL 126.77 mM;H₂O : < 0.1 mg/mL

SMILES : CC1(C=Cc2c(O1)ccc1c2O[C@@H]2COc3cc(c(cc3[C@@H]2C1=O)OC)OC)C

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1.Bortul R,etal.Deguelin, A PI3K/AKT inhibitor, enhances chemosensitivity of leukaemia cells with an active PI3K/AKT pathway.Br J Haematol. 2005 Jun;129(5):677-86.