Product Data Sheet

Product Name:	Podocarpusflavone A
Cat. No.:	GC33143

Chemical Properties

Cas. No.	22136-74-9		
SMILES	O=C1C=C(C2=CC=C(OC)C=C2)OC3=C(C4=CC(C5=CC(C6=C(O)C=C(O)C=C6O5)=O)=CC=C4O)C(O)=CC(O)=C13		
Formula	$C_{31}H_{20}O_{10}$	M.Wt	552.48
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Podocarpusflavone A		

Background

Podocarpusflavone A is a biflavone that has been found in *D. araucarioides* and has diverse biological activities.[1,2,3,4] It inhibits dengue virus NS5 RNA-dependent RNA polymerase (DENV-NS5 RdRp; IC_{50} = 0.75 µM).[3] Podocarpusflavone A also inhibits cathepsin B with an IC_{50} value of 1.68 µM and inhibits STAT3 in a reporter assay in a concentration-dependent manner.[1,2] It reduces the production of reactive oxygen species (ROS) and superoxide anions induced by phorbol 12-myristate 13-acetate in isolated human neutrophils when used at concentrations of 1 and 10 µM, respectively.[4] Podocarpusflavone A also inhibits aggregation of amyloid-β (1-40) peptide in a cell-free assay with an IC_{50} value of 4.9 µM.[5] Podocarpusflavone A (20 µM) decreases viability of A375, MALME-3M, SK-MEL-1, and SK-MEL-5 melanoma cells and reduces tumor growth in an A375 mouse xenograft model when administered at doses of 20 and 40 mg/kg.[2]

1.Zhang, Y., Tan, N.S., Huang, H., et al.Three bioactive biflavones isolated from Taxodium mucronatumYunnan Zhiwu Yanjiu27(1)107-110(2005) 2.Meng, H., Pang, Y., Liu, G., et al.Podocarpusflavone A inhibits cell growth of skin cutaneous melanoma by suppressing STAT3 signalingJ. Dermatol. Sci.100(3)201-208(2020) 3.Coulerie, P., Nour, M., Maciuk, A., et al.Structure-activity relationship study of biflavonoids on the Dengue virus polymerase DENV-NS5 RdRpPlanta Med.79(14)1313-1318(2013) 4.Arwa, P.S., Zeraik, M.L., Ximenes, V.F., et al.Redox-active biflavonoids from Garcinia brasiliensis as inhibitors of neutrophil oxidative burst and human erythrocyte membrane damageJ. Ethnopharmacol.174410-418(2015) 5.Sirimangkalakitti, N., Juliawaty, L.D., Hakim, E.H., et al.Naturally occurring biflavonoids with amyloid β aggregation inhibitory activity for development of anti-Alzheimer agentBioorg. Med. Chem. Lett.29(15)1994-1997(2019)

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA