

产品名称 : 4-Hydroxycoumarin

同义词 : ——

产品货号 : M22660

CAS Number : 1076-38-6

分子式 : C₉H₆O₃

分子量 : 162.14

化学全名 : ——

产品描述 : 4-Hydroxycoumarin, a coumarin derivative. 4-Hydroxycoumarin serves as an immediate precursor of 4-hydroxycoumarin (4HC) type anticoagulants (for example, warfarin). 4-Hydroxycoumarin derivatives are employed as the anticoagulant, antibacterial, antifungal, antiviral, antitumor, antiprotozoal, insecticidal, antimycobacterial, antimutagenic, antioxidant, anti-inflammatory agents, HIV protease inhibitors and tyrosine kinase inhibitors. The antioxidant activity of 4-Hydroxycoumarin synthetic derivatives and 4-methylumbelliferone were determined taking 4-Hydroxycoumarin as the reference compound. METHODS AND RESULTS: Six 3-aryl-4-Hydroxycoumarin derivatives were synthesized from 4-Hydroxycoumarin as precursor in order to evaluate changes in their antioxidant properties due to C3-aryl substituent nature. Free radical scavenging capacities of these compounds against two different species DPPH(·) and ABTS(·+) and the protecting ability towards the β-carotene-linoleic acid co-oxidation enzymatically induced by lipoxygenase were measured. In addition, the relationship between the activities of these molecules against DPPH radical and the bond dissociation energy of O-H (BDE) calculated using methods of computational chemistry was evaluated.

通路 : Endocrinology/Hormones

靶点 : AChR

受体 : AChR

溶解度 : DMSO: 247 mg/mL (1523.37 mM; Need ultrasonic)

SMILES : Oc1cc(=O)oc2ccccc12

存储条件 : (-20℃)

稳定性 : ≥ 2 years

参考文献 :

1. Effect of different C3-aryl substituents on the antioxidant activity of 4-hydroxycoumarin derivatives. Bioorg Med Chem. 2011 Nov 1;19(21):6233-8.