Data Sheet (Cat.No.TN1314)



6-Hydroxykaempferol

Chemical F	Properties
CAS No.:	4324-55-4
Formula:	C15H10O7
Molecular Weight:	302.2
Appearance:	N/A
Storage:	0-4°C for short te

Biological Description

Description	6-Hydroxykaempferol is a competitive inhibitor of tyrosinase compared to L-DOPA, it shows also high antioxidant activities.
Targets(IC ₅₀)	Tyrosinase: None
In vitro	Baicalein (1), 6-Hydroxyapigenin (6), 6-hydroxygalangin (13) and 6-hydroxy-kaempferol (14), which are naturally occurring flavonoids from a set of 14 hydroxy-flavones tested, exhibited high inhibitory effects on tyrosinase with respect to L-DOPA, while each of the 5,6,7-trihydroxyflavones 1, 6, 13 or 14 acted as a cofactor to monophenolase. Moreover, 6-Hydroxykaempferol (14) showed the highest activity and was a competitive inhibitor of tyrosinase compared to L-DOPA. 5,6,7-Trihydroxyflavones 1, 6, 13 or 14 showed also high antioxidant activities.

Solubility Information

Solubility

< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.309 mL	16.545 mL	33.091 mL
5 mM	0.662 mL	3.309 mL	6.618 mL
10 mM	0.331 mL	1.655 mL	3.309 mL
50 mM	0.066 mL	0.331 mL	0.662 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Inhibitory effects of 5,6,7-trihydroxyflavones on tyrosinase.Molecules, 2007, 12(1):86-97.

Inhibitors · Natural Compounds · Compound Libraries

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