Product Data Sheet

Inhibitors • Screening Libraries • Proteins

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ОН

HO

OH

3-(2,4-Dihydroxyphenyl)propanoic acid

Cat. No.:	HY-N1750
CAS No.:	5631-68-5
Molecular Formula:	C ₉ H ₁₀ O ₄
Molecular Weight:	182.17
Target:	Tyrosinase; Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, stored under nitrogen
	* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)

SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (1372.34 mM; Need ultrasonic)						
Preparing Stock Solutio	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg		
		1 mM	5.4894 mL	27.4469 mL	54.8938 mL		
		5 mM	1.0979 mL	5.4894 mL	10.9788 mL		
		10 mM	0.5489 mL	2.7447 mL	5.4894 mL		
	Please refer to the so	lubility information to select the ap	propriate solvent.				
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (11.42 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (11.42 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (11.42 mM); Clear solution						

BIOLOGICAL ACTIVITY				
Description	3-(2,4-Dihydroxyphenyl)propanoic acid (DPPacid) is a potent and competitive tyrosinase inhibitor, inhibits L-Tyrosine and DL-DOPA with an IC ₅₀ and a K _i of 3.02 μM and 11.5 μM, respectively ^[1] .			
IC ₅₀ & Target	Human Endogenous Metabolite			

REFERENCES

[1]. Shimizu K, et al. Novel vitamin E derivative with 4-substituted resorcinol moiety has both antioxidant and tyrosinase inhibitory properties. Lipids. 2001 Dec;36(12):1321-6.

Caution: Product has not been fully validated for medical applications. For research use only.

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