

4-Hydroxybenzoic Acid

货号: V6689

储存条件: 粉末-20°C可保存3年; 液体-80°C可保存12月。

产品描述

4-hydroxybenzoic acid (4-hba) is a non-flavonoid phenol found abundantly in bamboo, fruits and flowers which plays vital roles in repolarisation, hyperpolarisation and signaling the restoration of resting membrane potential through the regulation of the movement of K⁺ across the cellular membrane. 4-Hydroxybenzoic acid have anti-bacteria activity against most of the gram-positive and some gram-negative bacteria, at IC₅₀ concentrations of 160 micrograms/ml. 4-HBA could also inhibits A549 cancer cell proliferation with an IC₅₀ value ≤ 1 μg ml⁻¹, and that the effect is specific. In addition, Coenzyme Q is synthesized in multiple steps from the precursor 4-hydroxybenzoic acid. Supplementation of 4-hydroxybenzoic acid (4-HBA) fully restores endogenous CoQ10-biosynthesis in COQ2-deficient cell lines. This was accompanied by increased protein expression of CoQ10-biosynthesis-enzymes as well as a rescue of cell viability during stress conditions. In prokaryotes, 4-HBA forms from chorismate via shikimate pathway. As a useful industrial platform chemical, the high titer of 4-HBA can be converted into more useful compounds like resveratrol, muconic acid, gastrodin, xiamenmycin, vanillyl alcohol. Feeding experiments with 4-HBA precursors confirmed that the 4-HBA acts as a starting unit for xiamenmycin biosynthesis. In sum, 4-HBA is a bulk chemical due to its wide-ranging applications for the biosynthesis of numerous value-added products with various biological functions.

产品信息

CAS号	99-96-7	
分子式	C ₇ H ₆ O ₃	
分子量	138.12	
别名	p-hydroxybenzoic acid;4-hydroxybenzoate; PHBA;para-Hydroxybenzoic acid;	
溶解度	DMSO	120.0 mg/mL(868.8 mM) warming
	Water	Insoluble

