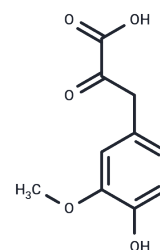


Vanilpyruvic acid

Chemical Properties

CAS No. :	1081-71-6
Formula:	C ₁₀ H ₁₀ O ₅
Molecular Weight:	210.18
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Vanilpyruvic acid is a metabolite of catecholamine and precursor of vanillic acid.
Targets(IC50)	Others
In vitro	Catecholamines, dopamine, norepinephrine and epinephrine constitute a class of chemical neurotransmitters and hormones that play an important role in regulating physiological processes and the development of neurological, mental, endocrine and cardiovascular diseases[1]. Catecholamines, namely dopamine (3,4-dihydrophenylethylamine), norepinephrine (noradrenaline) and epinephrine (adrenaline), act as neurotransmitters or hormones at central and peripheral levels. In addition to being the most abundant of the monoamine neurotransmitters, dopamine is also found in non-neuronal tissues such as the gastrointestinal tract and the kidney, where it participates in the regulation of sodium balance[2].

Solubility Information

Solubility	DMSO: 27 mg/mL (128.46 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.7578 mL	23.7891 mL	47.5783 mL
5 mM	0.9516 mL	4.7578 mL	9.5157 mL
10 mM	0.4758 mL	2.3789 mL	4.7578 mL
50 mM	0.0952 mL	0.4758 mL	0.9516 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Eisenhofer G, et al. Catecholamine metabolism: a contemporary view with implications for physiology and medicine. Pharmacol Rev. 2004 Sep;56(3):331-49.