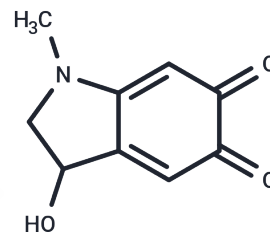


Adrenochrome

Chemical Properties

CAS No. :	54-06-8
Formula:	C ₉ H ₉ NO ₃
Molecular Weight:	179.17
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Adrenochrome (Adraxone) is a cytotoxic molecule that can be used to kill bacteria. Adrenochrome is an oxidized product of Epinephrine. Adrenochrome is a coronary systolic compound that acts on rat hearts and is associated with cardiotoxicity and can be used to determine superoxide dismutase activity. Adrenochrome is a potential psychotropic drug for the study of nervous system diseases.
Targets(IC50)	Others,Antioxidant,Drug Metabolite
In vitro	Microsomal calcium binding, calcium uptake, and Ca ²⁺ -stimulated Mg ²⁺ -dependent ATPase activities are reduced in the presence of Adrenochrome. The inhibitory impact of Adrenochrome on microsomal calcium uptake activity of the isolated membrane remains unaffected by various factors, including pH (ranging from 6.0 to 8.0), calcium concentrations (ranging from 10 to 200 μM), protein concentration (ranging from 0.02 to 0.10 mg/mL), temperature (ranging from 25 to 37 degrees C), and incubation time (ranging from 2 to 30 minutes). [1]
In vivo	In isolated rat hearts, the administration of Adrenochrome at concentrations ranging from 1 to 1000 ng/mL leads to a dose- and time-dependent elevation in coronary pressure. Moreover, the extent of constriction induced by Adrenochrome is influenced by the concentration of CaCl ₂ in the perfusion medium. [2]

Solubility Information

Solubility	DMSO: 90 mg/mL (502.32 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.5813 mL	27.9065 mL	55.8129 mL
5 mM	1.1163 mL	5.5813 mL	11.1626 mL
10 mM	0.5581 mL	2.7906 mL	5.5813 mL
50 mM	0.1116 mL	0.5581 mL	1.1163 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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Cassagnes LE, et al. Oxidative stress and neurodegeneration: The possible contribution of quinone reductase 2. *Free Radic Biol Med.* 2018;120:56-61.

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