abcam

Product datasheet

Ouabain octahydrate, Na+/K+ ATPase inhibitor ab120748

1 References 1 Image

Overview

Product name Ouabain octahydrate, Na+/K+ ATPase inhibitor

Description Na⁺/K⁺ ATPase inhibitor

Biological description Na $^+$ /K $^+$ ATPase inhibitor (K $_i$ = 30 μ M). Cardiac glycoside. Stimulates activity at low nanomolar

concentrations in rats. Improves cardiac function in myocardial infarction rats. Centrally active

following oral administration.

Purity > 97%

General notes It has been reported that an aqueous solution of this material stored overnight in a borosilicate

glass vial leads to the formation of ouabain-borate complexes.

It is therefore recommended that this material is stored in a plastic vial and any contact with

borosilicate glass is minimised.

CAS Number 11018-89-6

Chemical structure

Properties

 $\textbf{Chemical name} \qquad \qquad (1\beta,3\beta,5\beta,11\alpha)-3-[(6-Deoxy-\alpha-L-mannopyranosyl)oxy]-1,5,11,14,19-pentahydroxycard-20(22)-1,5,11,14,14,15-pentahydroxycard-20(22)-1,5,11,14,14,15-pentahydroxycard-20(22)-1,5,11,14,14,15-pentahydroxycard-20(22)-1$

enolide

Molecular weight 728.78

Molecular formula C₂₉H₄₄O₁₂.8H₂O

Storage instructions Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12

months.

Solubility overview Soluble in DMSO to 100 mM, in ethanol to 10 mM and in water to 10 mM.

Handling Wherever possible, you should prepare and use solutions on the same day. However, if you need

to make up stock solutions in advance, we recommend that you store the solution as aliquots in

tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

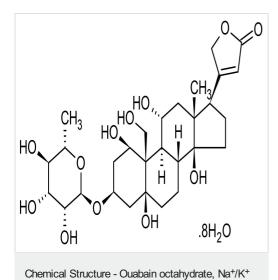
Toxic, refer to SDS for further information

Need more advice on solubility, usage and handling? Please visit our <u>frequently asked</u> <u>questions (FAQ) page</u> for more details.

Source

ripe seeds of African plants Strophanthus gratus and the bark of Acokanthera ouabaio

Images



ATPase inhibitor (ab120748)

2D chemical structure image of ab120748, Ouabain octahydrate, Na+/K+ ATPase inhibitor

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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