



Certificate of Analysis

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Product Name: Apocynin Catalog No.: 4663 Batch No.: 1

CAS Number: 498-02-2 EC Number: 207-854-5

IUPAC Name: 4'-Hydroxy-3'-methoxyacetophenone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_9H_{10}O_3$ Batch Molecular Weight: 166.17

Physical Appearance: Pale orange solid

Solubility: DMSO to 100 mM ethanol to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 100% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 65.05 6.06 Found 65.15 6.07





Product Information

Print Date: Oct 11th 2012

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CAS Number: 498-02-2 EC Number: 207-854-5

IUPAC Name: 4'-Hydroxy-3'-methoxyacetophenone

Description:

NADPH oxidase inhibitor. Demonstrates anti-inflammatory properties in a mouse model of carrageenan-induced pleurisy. Bioactivated by intracellular peroxidases; acts as an antioxidant in endothelial cells and vascular smooth muscle cells.

Physical and Chemical Properties:

Batch Molecular Formula: C₉H₁₀O₃
Batch Molecular Weight: 166.17

Physical Appearance: Pale orange solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Stolk *et al* (1994) Characteristics of the inhibition of NADPH oxidase activation in neutrophils by apocynin, a methoxy-substituted catechol. Am.J.Respir.Cell Mol.Biol. *11* 95. PMID: 8018341.

Heumüller *et al* (2008) Apocynin is not an inhibitor of vascular NADPH oxidases but an antioxidant. Hypertension *51* 211. PMID: 18086956.

Impellizzeri et al (2011) Effect of apocynin, a NADPH oxidase inhibitor, on acute lung inflammation. Biochem.Pharmacol. 81 636. PMID: 21147071.

