

# **Certificate of Analysis**

Print Date: Oct 22<sup>nd</sup> 2020

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Product Name: (±)-Eriodictyol Catalog No.: 7199 Batch No.: 1

CAS Number: 4049-38-1

IUPAC Name: 2-(3,4-Dihydroxyphenyl)-2,3-dihydro-5,7-dihydroxy-4*H*-1-benzopyran-4-one

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{12}O_6$ Batch Molecular Weight:288.26Physical Appearance:Beige solid

**Solubility:** DMSO to 100 mM

ethanol to 50 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

2. ANALYTICAL DATA

**HPLC:** Shows 99.1% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 62.5 4.2 Found 62.26 4.25



## **Product Information**

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#### **Description:**

Potent TRPV1 antagonist. Inhibits capsaicin (Cat. No. 0462) -induced Ca²+ influx in synaptosomes. Exhibits antinociceptive activity in animal models without affecting body temperature. Also antioxidant; protects against  $H_2O_2$ -induced neurotoxicity in vitro by activation of Nrf2/ARE signaling. Modeling studies predict binding to ACE2 preventing its interaction with SARS-CoV-2 S protein. Naturally-derived flavonoid. Orally bioavailable.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>15</sub>H<sub>12</sub>O<sub>6</sub> Batch Molecular Weight: 288.26 Physical Appearance: Beige solid

**Minimum Purity:** ≥98%

#### **Batch Molecular Structure:**

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

### Solubility & Usage Info:

DMSO to 100 mM ethanol to 50 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:

**Smith and Smith** *et al* (2020) Repurposing therapeutics for COVID-19: Supercomputer-based docking to the SARS-CoV-2 viral spike protein and viral spike protein-human ACE2 interface. ChemRxiv - Paper not yet peer reviewed.

**Lou** et al (2012) Eriodictyol protects against  $H_2O_2$ -induced neuron-like PC12 cell death through activation of Nrf2/ARE signaling pathway. Neurochem.Int. **61** 251. PMID: 22609376.

Rossato et al (2011) Eriodictyol: A flavonoid antagonist of the TRPV1 receptor with antioxidant activity. Biochem.Pharmacol. 81 544. PMID: 21087598.