Product Name: Luteolin
Catalog No.: 2874  Batch No.: 1
CAS Number: 491-70-3  EC Number: 207-741-0
IUPAC Name: 2-(3,4-Dihydroxyphenyl)-5,7-dihydroxy-4H-1-benzopyran-4-one

1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: \( \text{C}_{15}\text{H}_{10}\text{O}_{6} \cdot \text{1.75H}_{2}\text{O} \)
   Batch Molecular Weight: 308.76
   Physical Appearance: Yellow solid
   Solubility: 1eq. NaOH to 5 mM
              DMSO to 50 mM
              ethanol to 25 mM
   Storage: Store at +4°C
   Batch Molecular Structure:

2. ANALYTICAL DATA

   HPLC: Shows >98.7% purity
   \(^1\text{H NMR:} \) Consistent with structure
   Mass Spectrum: Consistent with structure
   Microanalysis:
      Carbon  Hydrogen  Nitrogen
      Theoretical  58.35  4.08
      Found  57.98  3.79

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Description: Anti-inflammatory, antioxidant and free radical scavenger. Inhibits LPS-induced TNF-α, IL-6 and inducible nitric oxide production and blocks NF-κB and AP-1 activation. Also inhibits TNF-α-induced COX-2 expression. Antiproliferative and chemopreventative; inhibits proliferation of Lewis lung carcinoma cells in vivo.

Physical and Chemical Properties:
Batch Molecular Formula: C_{18}H_{13}O_7\cdot \frac{1}{2}H_2O
Batch Molecular Weight: 308.76
Physical Appearance: Yellow solid
Minimum Purity: >98%

Storage: Store at +4°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:
1eq. NaOH to 5 mM
DMSO to 50 mM
ethanol to 25 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 aliquotted 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:

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