Luteolin
Item No. 10004161

CAS Registry No.: 491-70-3
Formal Name: 2-(3,4-dihydroxyphenyl)-5,7-dihydroxy-4H-1-benzopyran-4-one
MF: C_{15}H_{10}O_{6}
FW: 286.2
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/VIS: \( \lambda_{\text{max}} \) 255, 348

Laboratory Procedures

For long term storage, we suggest that luteolin be stored as supplied at -20°C. It should be stable for at least two years.

Luteolin is supplied as a crystalline solid. A stock solution may be made by dissolving the luteolin in an organic solvent purged with an inert gas. Luteolin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of luteolin in these solvents is approximately 5, 10, and 20 mg/ml, respectively.

Luteolin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, luteolin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Luteolin has a solubility of approximately 1 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Diets high in fiber contain plant lignan species that may be directly responsible for some observed health benefits of these diets. Luteolin is a polyphenolic flavone found in many plants including soybeans and perilla leaves. Luteolin is one of the most potent flavonoid inhibitors of soybean and reticulocyte 15-lipoxygenases, with an IC_{50} of 0.6 µM. Luteolin has also been found to inhibit the release of TNFα from neutrophils and to inhibit matrix metalloproteinases.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/10004161

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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