Rutin (hydrate)

Item No. 19868

CAS Registry No.: 250249-75-3
Formal Name: 3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-2-(3,4-dihydroxyphenyl)-5,7-dihydroxy-4H-1-benzopyran-4-one, trihydrate
Synonyms: Quercetin-3-O-rutinoside, Rutoside, Sophorin
MF: C27H30O16 • 3H2O
FW: 664.6
Purity: ≥98%
UV/Vis.: λmax: 257, 359 nm
Supplied as: A crystalline solid
Storage: Room temperature
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

Rutin (hydrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the rutin (hydrate) in the solvent of choice. Rutin (hydrate) is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of rutin (hydrate) in these solvents is approximately 25 and 30 mg/ml, respectively.

Rutin (hydrate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, rutin (hydrate) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Rutin (hydrate) has a solubility of approximately 0.16 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.

Description

Rutin is a natural flavonol glycoside with iron chelating and antioxidant properties. At least in part due to these actions, rutin has diverse actions at cellular and physiological levels, demonstrating anti-inflammatory, anti-cancer, and anti-fibrosis effects in animal models. Rutin also displays hepatoprotective and neuroprotective actions in animal models.

References