Data Sheet

Quercetin

Catalog #: 27214

Size: 5 g

CAS Registry #: 117-39-5

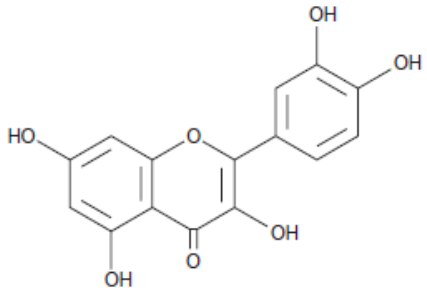
Purity: >95%

Chemical Formula: $C_{15}H_{10}O_7$

Molecular Weight: 302.2

Lot #: 120605

Structure:



Description: Quercetin is an inhibitor of PDEs of both cAMP and cGMP. It is a flavonoid found in plant and fruit bark or rinds. It is estimated that normal dietary intake of Quercetin for humans is 0.1-0.2 mg/kg. Quercetin can induce renal adenomas in male rats when fed at 2,000 mg/kg.

Appearance: A crystalline solid

Solubility: Soluble in ethanol, DMSO and DMF, purged with an inert gas. Solubility in ethanol is 2 mg/ml and solubility in DMSO and DMF is 30 mg/ml. For maximum solubility in aqueous buffers, dissolve in DMSO and then dilute with the aqueous buffer of choice. Do not store aqueous solutions for more than one day.

Biological Activity: Quercetin has been shown to inhibit PDE 5A with an IC_{50} value of 1.9 µM.

Storage/Stability: Store at or below -20°C for up to two years.

Quality Control: The purity was determined by HPLC analysis.

References:

1. Gschwendt, M., *et al., Biochem. Biophys. Res. Commun.* 1983; **117(2)**: 444-447.
2. Young, J.F., *et al., Am. J. Clin. Nutr.* 1999; **69(1)**: 87-94.
3. Toxicology and carcinogenesis studies of quercetin in F344/N rats. National Toxicology Program, Technical Report, TR-409, 1-171. Retrieved August 4, 2004, from http://ntp-server.niehs.nih.gov/htdocs/LT-studies/tr409.html
4. Ruckstuhl, M., *et al., Biochem. Pharmacol.*1979; **28(4)**: 535-538.
5. Lang, D.R., *et al., Biochim. Biophys. Acta.* 1974; **333(2)**: 180-186.
6. Lines, T.C., *et al., Phytomedicine.* 2006 Mar; **13(4)**: 236-9.

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