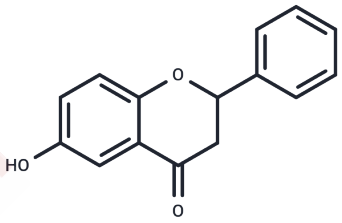
# Data Sheet (Cat.No.TN1308)

TargetMol

## 6-Hydroxyflavanone

### Chemical Properties



CAS No. : 4250-77-5

Formula: C15H12O3

Molecular Weight: 240.25

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | 6-Hydroxyflavanone, extracted from the leaves of Acorus calamus, exhibits anti-inflammatory and anti-neuropathic pain activity by targeting cyclooxygenase-2 (COX-2), 5-lipoxygenase (5-LOX), as well as opioid and GABA-A receptors. 6-Hydroxyflavanone has anti-injury sensory properties in a streptozotocin-induced diabetic neuropathy model. in a streptozotocin-induced diabetic neuropathy model with anti-injury sensory properties. |
| Targets(IC50) | Opioid Receptor,GABA Receptor,COX,Lipoxygenase |
| In vivo | 6-Hydroxyflavanone (6-HF) (6-HF) (5, 30, and 60 mg/kg ) inhibited the COX-2 and 5-LOX enzymes significantly. It substantially reduced heat nociception in a hot plate analgesia meter, as well as carrageenan-induced paw edema in rodent models. The authors discovered that 6-HF exhibited anti-nociception properties in a streptozotocin-induced diabetic neuropathy (DIN) model. According to the findings of this study, 6-HF demonstrated the ability to diminish inflammation caused by diabetes, as well as to exert an anti-nociceptive.[3] |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 2.41 mg/mL (10.03 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 4.1623 mL | 20.8117 mL | 41.6233 mL |
| 5 mM | 0.8325 mL | 4.1623 mL | 8.3247 mL |
| 10 mM | 0.4162 mL | 2.0812 mL | 4.1623 mL |
| 50 mM | 0.0832 mL | 0.4162 mL | 0.8325 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Nishizaki Y, et al. Effect of flavonoids on androgen and glucocorticoid receptors based on in vitro reporter gene assay. Bioorg Med Chem Lett. 2009;19(16):4706-4710.
Akbar S, et al. Targeting Anti-Inflammatory Pathways to Treat Diabetes-Induced Neuropathy by 6-Hydroxyflavanone. Nutrients. 2023;15(11):255