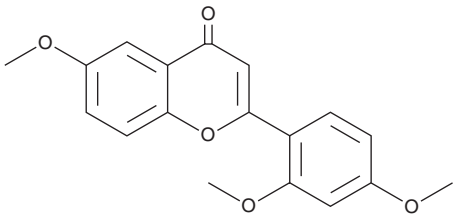
PRODUCT INFORMATION

6,2',4'-Trimethoxyflavone

Item No. 33150

CAS Registry No.:	720675-74-1
Formal Name:	2-(2,4-dimethoxyphenyl)-6-methoxy-4H-1-benzopyran-4-one
MF:	$C_{18}H_{16}O_5$
FW:	312.3
Purity:	≥95%
UV/Vis.:	λ_{max}: 226, 271, 334 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

6,2',4'-Trimethoxyflavone is supplied as a crystalline solid. A stock solution may be made by dissolving the 6,2',4'-trimethoxyflavone in the solvent of choice, which should be purged with an inert gas. 6,2',4'-Trimethoxyflavone is soluble in organic solvents chloroform, ethanol, DMSO and dimethyl formamide (DMF). The solubility of 6,2',4'-trimethoxyflavone in chloroform is approximately 10 mg/ml. 6,2',4'-Trimethoxyflavone is slightly soluble in ethanol, DMSO, and DMF.

Description

6,2',4'-Trimethoxyflavone is a flavonoid that has been found in *T. acutifolius* and has diverse biological activities.[1-3] It acts as an antagonist of the aryl hydrocarbon receptor (AhR), inhibiting benzo[a]pyrene-induced AhR-dependent transcription in a reporter assay when used at concentrations of 2 and 10 µM.[1] 6,2',4'-Trimethoxyflavone decreases LPS-induced production of TNF-α in THP-1 cells (IC_{50} = 47.7 µg/ml).[2] It inhibits cell migration and invasion, but not proliferation, of HN-30 head and neck squamous cell carcinoma (HNSCC) cells *in vitro* when used at a concentration of 10 µM.[3]

References

1. Murray, I.A., Flaveny, C.A., DiNatale, B.C., *et al* Antagonism of aryl hydrocarbon receptor signaling by 6,2',4'-trimethoxyflavone. *J. Pharmacol. Exp. Ther.* **332(1)**, 135-144 (2010).
2. Apaza T, L., Serban, A.M., Cabanillas, A.H., *et al*. Flavonoids of Tripodanthus acutifolius inhibit TNF-α production in LPS-activated THP-1 and B16-F10 cells. *J. Ethnopharmacol.* **242**, 112036 (2019).
3. DiNatale, B.C., Smith, K., John, K., *et al*. Ah receptor antagonism represses head and neck tumor cell aggressive phenotype. *Mol. Cancer Res.* **10(10)**, 1369-1379 (2012).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

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