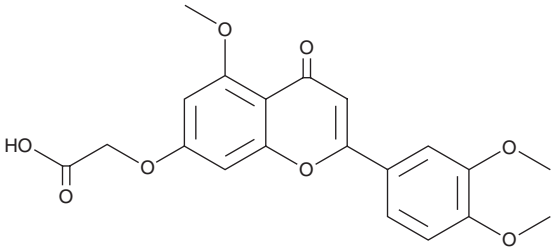
PRODUCT INFORMATION

Recoflavone

Item No. 44582

CAS Registry No.:	203191-10-0
Formal Name:	2-[[2-(3,4-dimethoxyphenyl)-5-methoxy-4-oxo-4H-1-benzopyran-7-yl]oxy] acetic acid
Synonyms:	7-Carboxymethyloxy-3′,4′,5-trimethoxyflavone, DA-6034
MF:	$C_{20}H_{18}O_8$
FW:	386.4
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

Recoflavone is supplied as a solid. A stock solution may be made by dissolving the recoflavone in the solvent of choice, which should be purged with an inert gas. Recoflavone is slightly soluble (0.1-1 mg/ml) in DMSO and a 1:1 solution of acetonitrile:water.

Description

Recoflavone is a synthetic flavonoid with diverse biological activities and a derivative of eupatilin (Item No. 19601).[1-4] It induces chloride currents and intracellular calcium release in primary human conjunctival epithelial cells when used at concentrations of 10 and 100 µM, respectively.[1] Recoflavone (10 and 100 µM) induces the migration of AGS and SNU-484 human gastric epithelial cells in a scratch assay in an *in vitro* model of gastric ulcer healing.[2] *In vivo*, recoflavone (50 mg/kg) decreases body weight gain rate, liver weight and triglyceride levels, and hepatic macrophage and $CD8^+$ T cell infiltration in a mouse model of obesity induced by a high-fat diet.[3] Recoflavone (30 mg/kg) decreases disease severity, increases colon length, and increases survival in a mouse model of colitis induced by dextran sulfate (DSS; Item No. 23250).[4] It also inhibits azoxymethane- and DSS-induced carcinogenesis in a mouse model of colitis-associated cancer.

References

1. Yang, Y.M., Park, S., Ji, H., *et al.* DA-6034 Induces [Ca2$^+$]i increase in epithelial cells. *Korean J. Physiol. Pharmacol.* **18(2)**, 89-94 (2014).
2. Kim, Y.W., Lee, W.H., Choi, S.M., *et al.* DA6034 promotes gastric epithelial cell migration and wound-healing through the mTOR pathway. *J. Gastroenterol. Hepatol.* **27(2)**, 397-405 (2012).
3. Kim, H.M., Kwon, M.-H., Lee, E.S., *et al.* DA-6034 ameliorates hepatic steatosis and inflammation in high fat diet-induced obese mice. *J. Yeungnam Med. Sci.* **41(2)**, 103-112 (2024).
4. Nam, S.Y., Kim, J.S., Kim, J.M., *et al.* DA-6034, a derivative of flavonoid, prevents and ameliorates dextran sulfate sodium-induced colitis and inhibits colon carcinogenesis. *Exp. Biol. Med. (Maywood)* **233(2)**, 180-191 (2008).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM