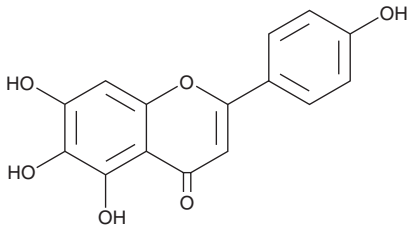
PRODUCT INFORMATION

Scutellarein

Item No. 24977

CAS Registry No.:	529-53-3
Formal Name:	5,6,7-trihydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one
Synonym:	6-Hydroxyapigenin
MF:	$C_{15}H_{10}O_6$
FW:	286.2
Purity:	≥98%
UV/Vis.:	λ_{max}: 219, 338 nm
Supplied as:	A crystalline 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

Scutellarein is supplied as a crystalline solid. A stock solution may be made by dissolving the scutellarein in the solvent of choice, which should be purged with an inert gas. Scutellarein is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of scutellarein in ethanol is approximately 0.2 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Scutellarein is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, scutellarein should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Scutellarein has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Scutellarein is a flavone that has been isolated from *S. baicalensis* and has antioxidant, enzyme inhibitory, anti-inflammatory, and antiproliferative biological activities.[1-6] It has antioxidant activity in a total reactive antioxidant potential (TRAP) assay when used at a concentration of 1 µg/ml.[2] Scutellarein inhibits sucrose hydrolysis by rat intestinal α-glucosidase and ATPase activity of the severe acute respiratory syndrome (SARS) coronavirus helicase nsP13 (IC_{50}s = 12 and 0.86 µM, respectively).[3,4] It decreases nitric oxide (NO) release and mRNA expression of inducible NO synthase (iNOS) and TNF-α induced by LPS in RAW 264.7 macrophages when used at a concentration of 50 µM.[5] *In vivo*, scutellarein (0.5 µg/g) decreases tumor weight and volume in an HT-1080 human fibrosarcoma mouse xenograft model.[6]

References

1. Hui, K.M., Wang, X.H., and Xue, H. *Planta Med.* **66(1)**, 91-93 (2000).
2. Siraichi, J.T.G., Felipe, D.F., Brambilla, L.Z.S., *et al. PLoS One* **8(8)**, e72733 (2013).
3. Kawabata, J., Mizuhata, K., Sato, E., *et al. Biosci. Biotechnol. Biochem.* **67(2)**, 445-447 (2003).
4. Yu, M.-S., Lee, J., Lee, J.M., *et al. Bioorg. Med. Chem. Lett.* **22(12)**, 4049-4054 (2012).
5. Sung, N.Y., Kim, M.-Y., and Cho, J.Y. *Korean J. Physiol. Pharmacol.* **19(5)**, 441-449 (2015).
6. Shi, X., Chen, G., Liu, X., *et al. Int. J. Mol. Med.* **35(1)**, 31-38 (2015).

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