

0005 - Skullcap for Flavonoids by HPLC

Botanical Name: *Scutellaria lateriflora*

Common Names: Blue Skullcap, Hoodwort, Virginian Skullcap, Mad-dog Skullcap

Plant Description:

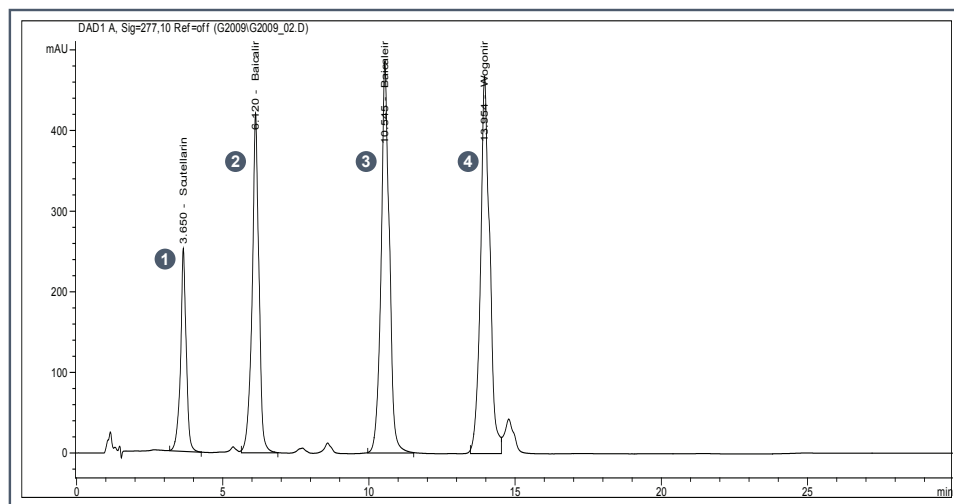
Scutellaria lateriflora is a hardy perennial herb native to North America. A wet-land loving species, this plant grows near marshes, meadows and other wet habitats. It is a member of the mint family and can grow 60 to 80cm in height with blue flowers just under 1cm long. These flowers do not appear at the top of the main stem, but along the length of side branches that grow from leaf axils.



Therapeutic Use Overview:

Scutellaria lateriflora is used in herbal medicine as a mild sedative and sleep promoter. A wide range of compounds with various uses have been isolated from *Scutellaria* species, with each species containing unique compounds. Baicalin, a phenolic found in the leaves of *Scutellaria lateriflora*, is a known anti-inflammatory and analgesic. Wogonin, another phenolic compound, exhibits anxiolytic properties in mice. Other compounds, flavones in particular, have been reported to show high affinity to benzodiazepine receptor sites exhibiting anxiolytic effects.

Representative HPLC Analysis: Mixed Standard Solution



Analytes:

① Scutellarein, ② Baicalin, ③ Baicalein, ④ Wogonin

Instrument Parameters

Column: Phenomenex Synergi Max-RP
150 x 4.6 mm, 4u

Detection: UV-Vis @ 277 nm

Flow Rate: 1.5 mL/min

Injection Volume: 20 µL

Temperature: 25 °C

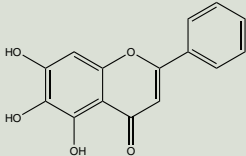
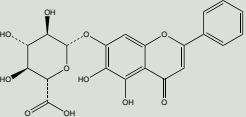
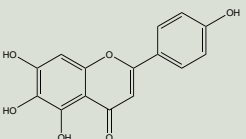
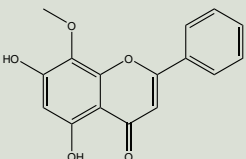
Mobile Phase A: 0.1 % H₃PO₄ (aq)

Mobile Phase B: ACN

Gradient Program

Time (min)	%A	%B
0	80	20
20	45	55
23	80	20
30	80	20

Phytochemical Reference Standards

Product Description And Details	Product ID	Qty
 <p>BAICALEIN Grade: P CAS#: [491-67-8] Chemical Formula: C₁₅H₁₀O₅ FW: 270.25</p>	ASB-00002015-005 ASB-00002015-010 ASB-00002015-025	5mg 10mg 25mg
 <p>BAICALIN Grade: P CAS#: [21967-41-9] Chemical Formula: C₂₁H₁₈O₁₁ FW: 446.36</p>	ASB-00002030-005 ASB-00002030-010 ASB-00002030-025	5mg 10mg 25mg
 <p>SCUTELLAREIN Grade: SH CAS#: [529-53-3] Chemical Formula: C₁₅H₁₀O₆ FW: 286.24</p>	ASB-00019096-005	5mg
 <p>WOGONIN Grade: P CAS#: [632-85-9] Chemical Formula: C₁₆H₁₂O₅ FW: 284.26</p>	ASB-00023510-005 ASB-00023510-010 ASB-00023510-025	5mg 10mg 25mg

Reference Standard Kits

Product Name	Contents	Product ID	Qty
SKULLCAP STANDARDS KIT	BAICALEIN(P) BAICALIN(P) SCUTELLAREIN(SH) WOGONIN(P)	KIT-00019575-005	3 x 5mg vials

Botanical Reference Materials

Product Description	Grade	Product ID	Qty
SKULLCAP (SCUTELLARIA LATERIFLORA) HERB	BRM	ASB-00030190-005	5g
SKULLCAP (CHINESE) (SCUTELLARIA BAICALENSIS) ROOT	XRM	ASB-00030191-005	5g
SKULLCAP (CHINESE) (SCUTELLARIA BAICALENSIS) ROOT	RBRM	ASB-00030740-005	5g

SKULLCAP (CHINESE) CURED (SCUTELLARIA BAICALENSIS) ROOT	RBRM	ASB-00030741-005	5g
SKULLCAP (CHINESE) (SCUTELLARIA BAICALENSIS) ROOT	BRM	ASB-00030873-005	5g
BARBED SKULLCAP (SCUTELLARIA BARBATA) HERB	RGBRM	ASB-00030874-005	5g
SKULLCAP (CHINESE) (SCUTELLARIA BAICALENSIS) ROOT	RGBRM	ASB-00030876-005	5g

Monographs

Product Description	Grade	Product ID	Qty
AHP SKULLCAP AERIAL MONOGRAPH	BK	ASB-00040820-00B	1 book

Additional Related Compounds

Product Description And Details	Product ID	Qty
BAICALEIN Grade: RG CAS#: [491-67-8] Chemical Formula: C ₁₅ H ₁₀ O ₅ FW: 270.25	ASB-00002016-100	100mg
BAICALEIN-7-METHYLEETHER(RG) Grade: RG CAS#: [29550-13-8] Chemical Formula: C ₁₆ H ₁₂ O ₅ FW: 284.28	ASB-00002020-005 ASB-00002020-010	5mg 10mg
BAICALEIN-5,6,7-TRIMETHYLEETHER Grade: RG CAS#: [973-67-1] Chemical Formula: C ₁₈ H ₁₆ O ₅ FW: 312.33	ASB-00002025-005 ASB-00002025-010	5mg 10mg
SCUTELLAREIN TETRAMETHYLEETHER Grade: RG CAS#: [1168-42-9] Chemical Formula: C ₁₉ H ₁₈ O ₆ FW: 342.35	ASB-00019095-005	5mg
SKULLCAPFLAVONE I Grade: RG CAS#: [41060-16-6] Chemical Formula: C ₁₇ H ₁₄ O ₆ FW: 314.29	ASB-00019288-005	5mg