

0006 - Valerian for Valerenic Acids by HPLC

Botanical Name: *Valeriana officinalis*

Common Names: Valerian, Garden Valerian, Garden Heliotrope

Plant Description:

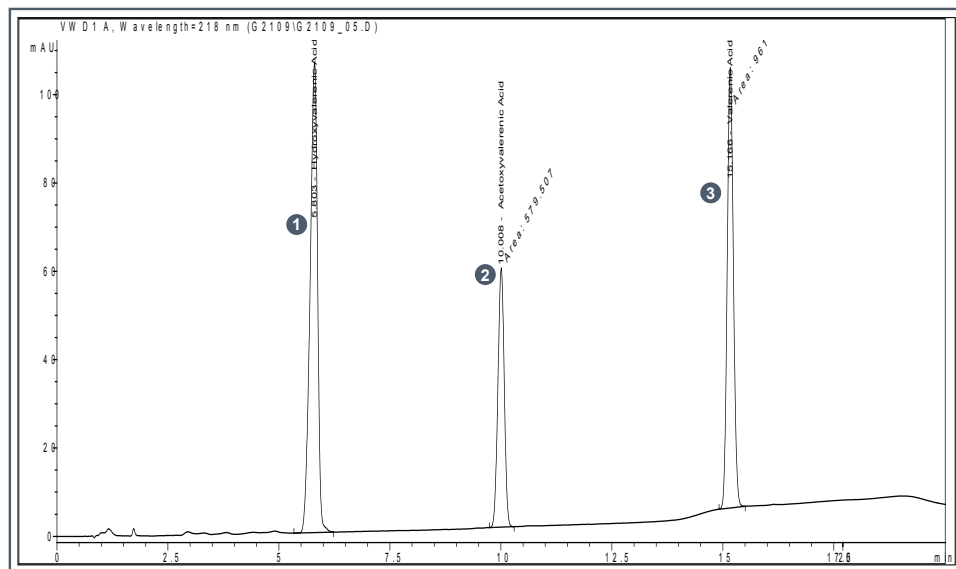
Valeriana officinalis is a hardy perennial flowering plant with pink or white flowers blooming in the summer months. It grows throughout most of Europe but is rare in the southern sections and is cultivated and naturalized in North America. Stems can be 15-150cm long with oppositely placed leaves and flowers covering the tops of the plants.

Therapeutic Use Overview:

Valerian has been widely used throughout as a sedative in herbal medicines with supporting research indicating its effectiveness in the nervous, digestive, and respiratory systems. The roots of the plant are cut, ground, dried and placed into capsules.



Representative HPLC Analysis: Mixed Standard Solution



Analytes:

① Hydroxyvalerenic Acid, ② Acetoxyvalerenic Acid, ③ Valerenic Acid

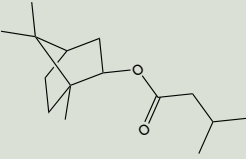
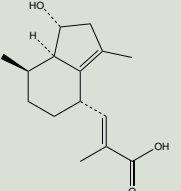
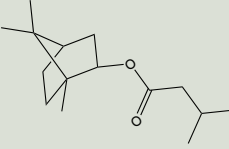
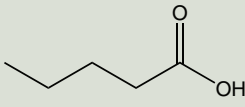
Instrument Parameters

Column:	Phenomenex Luna C18(2) 150 x 4.6 mm, 5u	
Detection:	UV-Vis @ 218 nm	
Flow Rate:	1.5 mL/min	
Injection Volume:	5 µL	
Temperature:	30 °C	
Mobile Phase A:	40:60:0.2 (ACN: Milli-Q Water: H3PO4)	
Mobile Phase B:	80:20:0.2 (ACN: Milli-Q Water: H3PO4)	

Gradient Program

Time (min)	%A	%B
0	100	0
20	0	100
22	100	0
30	100	0

Phytochemical Reference Standards

Product Description And Details	Product ID	Qty
 <p>ACETOXYVALERENIC ACID Grade: P CAS#: [81397-67-3] Chemical Formula: $C_{17}H_{24}O_4$ FW: 292.37</p>	ASB-00001090-005 ASB-00001090-010 ASB-00001090-025 ASB-00001090-050	5mg 10mg 25mg 50mg
 <p>HYDROXYVALERENIC ACID Grade: P CAS#: [1619-16-5] Chemical Formula: $C_{15}H_{22}O_3$ FW: 250.34</p>	ASB-00008730-005 ASB-00008730-010 ASB-00008730-025 ASB-00008730-100	5mg 10mg 25mg 100mg
 <p>ISOBORNYL ISOVALERATE Grade: SG CAS#: [7779-73-9] Chemical Formula: $C_{15}H_{26}O_2$ FW: 238.37</p>	ASB-00009197-001	1mg
 <p>VALERENIC ACID Grade: AHP CAS#: [3569-10-6] Chemical Formula: $C_6H_{13}O_2$ FW: 234.33</p>	ASB-00012126-100	100mg

Reference Standard Kits

Product Name	Contents	Product ID	Qty
VALERIAN STANDARD KIT	ACETOXYVALERENIC ACID(P) HYDROXYVALERENIC ACID(P) VALERENIC ACID(AHP)	KIT-00022160-005 KIT-00022160-010	3 x 5mg vials 3 x 10mg vials
VALERIAN HPLC ANALYSIS KIT	ACETOXYVALERENIC ACID(P) HYDROXYVALERENIC ACID(P) VALERENIC ACID(AHP)	KIT-00022161-0HK	3 x 10mg + C
VALERIAN ROOT HP-TLC KIT W/ STANDARDS	AHPVALERIAN ROOT MONOGRAPH BIOLUMINEX PLATES VALERENIC ACID VALERIAN (V. OFFICINALIS) ROOT BRM	KIT-00035890-00K	Kit

Botanical Reference Materials

Product Description	Grade	Product ID	Qty
VALERIAN (VALERIANA OFFICINALIS) ROOT	RGBRM	ASB-00030783-005	5g
VALERIAN (VALERIANA OFFICINALIS) ROOT	XRM	ASB-00034899-005	5g
VALERIAN (VALERIANA OFFICINALIS) ROOT	BRM	ASB-00034900-005	5g

Monographs

Product Description	Grade	Product ID	Qty
AHP VALERIAN ROOT MONOGRAPH	BK	ASB-00040900-00B	1 book

Additional Related Compounds

Product Description And Details	Product ID	Qty
BORNEOL, (-) - Grade: SG CAS#: [464-45-9] Chemical Formula: C ₁₀ H ₁₈ O FW: 154.25	ASB-00002356-001 ASB-00002356-250	1mg 250mg
BORNYL ACETATE, L - Grade: SG CAS#: [5655-61-8] Chemical Formula: C ₁₂ H ₂₀ O ₂ FW: 196.29	ASB-00002357-001 ASB-00002357-100	1mg 100mg
CAFFEIC ACID Grade: AHP CAS#: [331-39-5] Chemical Formula: C ₉ H ₈ O ₄ FW: 180.16	ASB-00003024-005 ASB-00003024-010 ASB-00003024-025 ASB-00003024-100	5mg 10mg 25mg 100mg
CHLOROGENIC ACID Grade: AHP CAS#: [327-97-9] Chemical Formula: C ₁₆ H ₁₈ O ₉ FW: 354.31	ASB-00003450-005 ASB-00003450-010 ASB-00003450-025 ASB-00003450-050	5mg 10mg 25mg 50mg

Product Description And Details	Product ID	Qty
EUCALYPTOL(1,8-CINEOLE) Grade: AHP CAS#: [3569-10-6] Chemical Formula: C ₁₅ H ₂₂ O ₂ FW: 234.33	ASB-00022150-005 ASB-00022150-010 ASB-00022150-025 ASB-00022150-100	5mg 10mg 25mg 100mg
ISOFERULIC ACID Grade: P CAS#: [537-73-5] Chemical Formula: C ₁₀ H ₁₀ O ₄ FW: 194.19	ASB-00009251-025 ASB-00009251-100	25mg 100mg
ISOLEUCINE, L- Grade: P CAS#: [73-32-5] Chemical Formula: C ₆ H ₁₃ O ₂ FW: 131.17	ASB-00009259-100	100mg
ISOVALERIC ACID Grade: SG CAS#: [503-74-2] Chemical Formula: C ₅ H ₁₀ O ₂ FW: 446.36	ASB-00009625-001	1mg
LEUCINE, L- Grade: P CAS#: [61-90-5] Chemical Formula: C ₁₅ H ₂₂ O ₂ FW: 234.33	ASB-00022150-005 ASB-00022150-010 ASB-00022150-025 ASB-00022150-100	5mg 10mg 25mg 100mg
MENTHYL ISOVALERATE Grade: SG CAS#: [16409-46-4] Chemical Formula: C ₁₅ H ₂₈ O ₂ FW: 240.38	ASB-00013975-001 ASB-00013975-100	1mg 100mg
METHYL ISOVALERATE Grade: SG CAS#: [556-24-1] Chemical Formula: C ₆ H ₁₂ O ₂ FW: 270.25	ASB-00013588-001	1mg

Product Description And Details	Product ID	Qty
VALERALDEHYDE, N - Grade: SG CAS#: [110-62-3] Chemical Formula: C ₅ H ₁₀ O FW: 86.13	ASB-00013975-001 ASB-00013975-100	1mg 100mg
VALERIC ACID Grade: SG CAS#: [109-52-4] Chemical Formula: C ₅ H ₁₀ O ₂ FW: 102.13	ASB-00022195-001 ASB-00022195-100	1mg 100mg
VALERIC ACID ETHYLESTER Grade: SG CAS#: [539-82-2] Chemical Formula: C ₇ H ₁₄ O ₂ FW: 130.18	ASB-00013975-001 ASB-00013975-100	1mg 100mg