

0042 - Rosemary by HPLC

Botanical Name: *Rosmarinus officinalis*

Common Names: Rosemary, polar plant, compass-weed, compass plant

Plant Description:

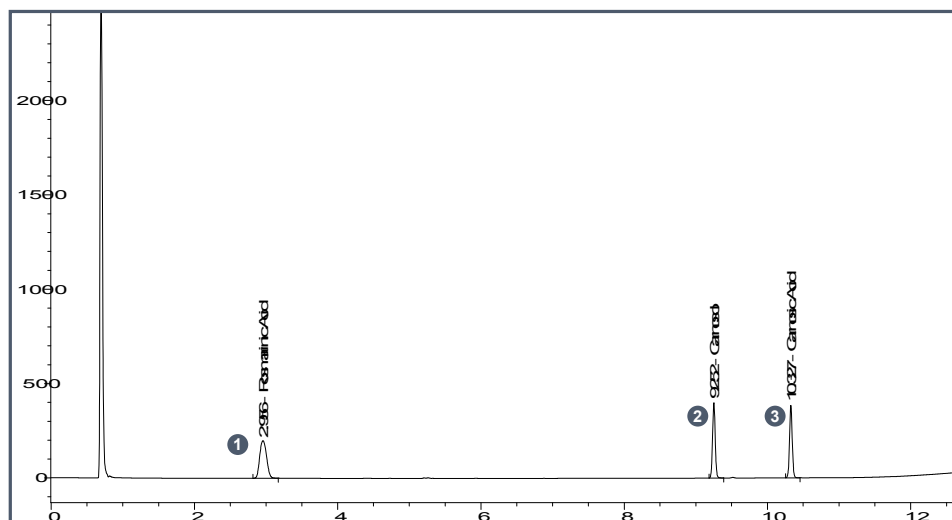
Rosmarinus officinalis is a native Mediterranean perennial herb. It is a woody plant with fragrant, needle-like leaves. It is tolerant to salt spray and can survive using water from humid air. Growing to a height and spread of 1 meter, with 2.5-3cm leaves, its flowers are small and pale blue.

Therapeutic Use Overview:

Rosemary has a long history of use in not only herbal remedies - as a spice, but in culinary preparations as well. It has been used to improve memory with modern studies showing that one constituent, carnosic acid, may shield the brain from free radicals. This shielding has been thought to lower the risk of strokes and neurodegenerative diseases. It has also been used as a treatment of dyspepsia and headache. Oil based treatments are used topically for rheumatic diseases.



Representative HPLC Analysis: Mixed Standard Solution



Analytes:

① Rosmarinic Acid, ② Carnosol, ③ Carnosic Acid,

Instrument Parameters

Column: Phenomenex Luna C18(2)-HST
100 x 2.0 mm, 2.5u

Detection: UV-Vis

Flow Rate: 0.5 mL/min

Injection Volume: 3 µL

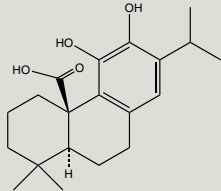
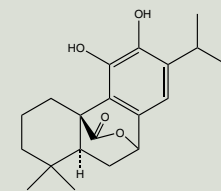
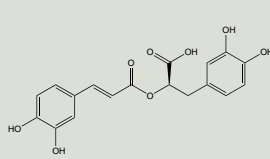
Temperature: 50 °C

Mobile Phase A: 0.1% Phosphoric acid
in water

Mobile Phase B: Acetonitrile
Gradient Program

Time (min)	%A	%B
0.0	80	20
1.0	80	20
9.0	20	80
10.0	5	95
13.0	5	95
14.0	80	20
18.0	80	20

Phytochemical Reference Standards

Product Description And Details	Product ID	Qty
 <p>CARNOSIC ACID Grade: P CAS#: [3650-09-7] Chemical Formula: $C_{20}H_{28}O_4$ FW: 332.44</p>	ASB-00003198-001 ASB-00003198-005 ASB-00003198-010 ASB-00003198-050	1g 5mg 10mg 50mg
 <p>CARNOSOL Grade: P CAS#: [5957-80-2] Chemical Formula: $C_{20}H_{26}O_4$ FW: 330.42</p>	ASB-00003199-001 ASB-00003199-005 ASB-00003199-010 ASB-00003199-050	1g 5mg 10mg 50mg
 <p>ROSMARINIC ACID Grade: P CAS#: [20283-92-5] Chemical Formula: $C_{18}H_{16}O_8$ FW: 360.31</p>	ASB-00018370-005 ASB-00018370-010 ASB-00018370-025	5mg 10mg 25mg

Reference Standards Kits

Product Name	Contents	Product ID	Qty
ROSEMARY STANDARDS KIT	CARNOSIC ACID(P), CARNOSOL(P), ROSMARINIC ACID(P)	KIT-00018375-010	3 x 10mg

Botanical Reference Materials

Product Description	Grade	Product ID	Qty
ROSEMARY (ROSMARINUS OFFICINALIS) LEAF	VBRM	ASB-00030657-005	5g
ROSEMARY (ROSMARINUS OFFICINALIS) LEAF	RGBRM	ASB-00030715-005	5g