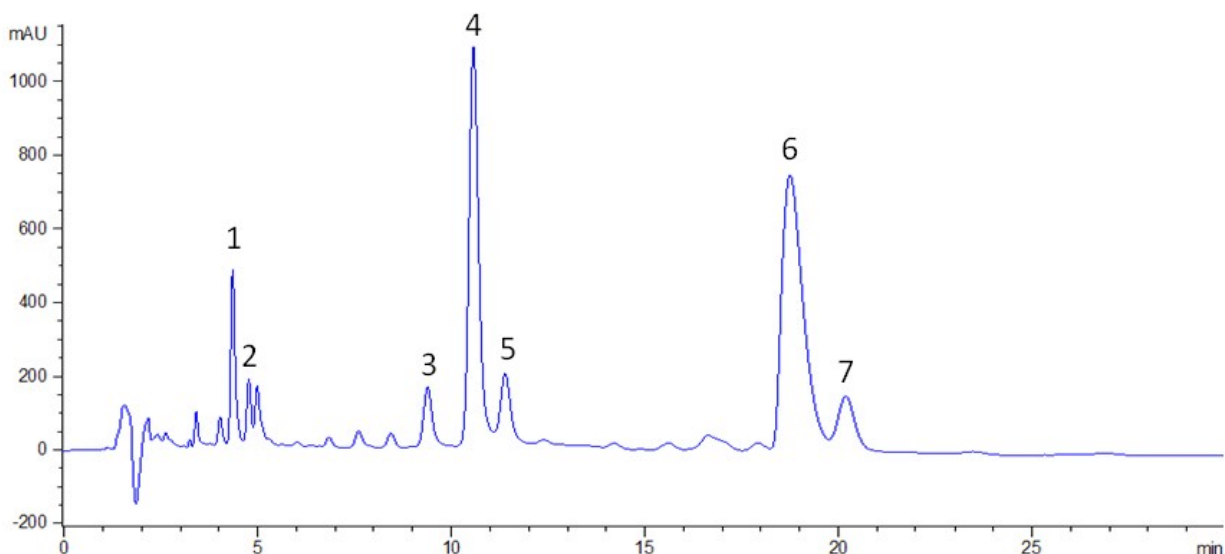


## Supplementary material-1

### LC-MS analysis of Rosemary leaves extract

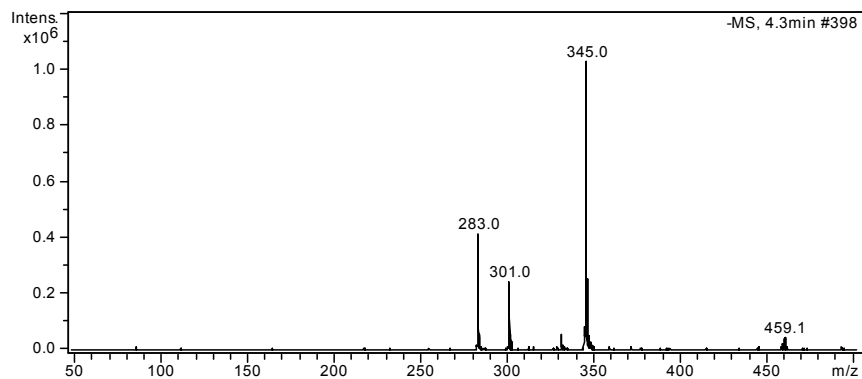
Liquid Chromatography-Mass Spectrometry (LC-MS) analysis was performed to know the major components present in RE. LC-MS was performed on Agilent 1100 ion trap MSD mass spectrometer with ESI source in negative mode equipped with a degasser (G1379A), binary pump (G1312A), auto sampler (G1315B) (Waldbronn, Germany). The data acquired and processed using LC/MSD trap ChemStation software 4.2. Column was maintained at ambient temperature ( $23 \pm 1$  °C), nitrogen as nebulizer and curtain gas and collision induced dissociation using helium gas. Ion source conditions (mass range: 50-600, temp: 325°C, nebulizer gas: 40 psi, dry gas: 8.0 L/min, ion spray voltage: 5000 V, collision energy: 33 V and dwell time: 200ms). Chromatographic conditions: column (Waters XSELECT CSH Phenyl-Hexyl, 5 $\mu$ m; 4.6X150mm), mobile phase condition (Acetonitrile and water with 0.1% Formic acid (50:50)), flow rate (1.0 mL/min) and detection (DAD, 210nm).

**Figure S1: Chromatogram (210nm) corresponding to the LC-MS analysis of the Rosemary extract.**

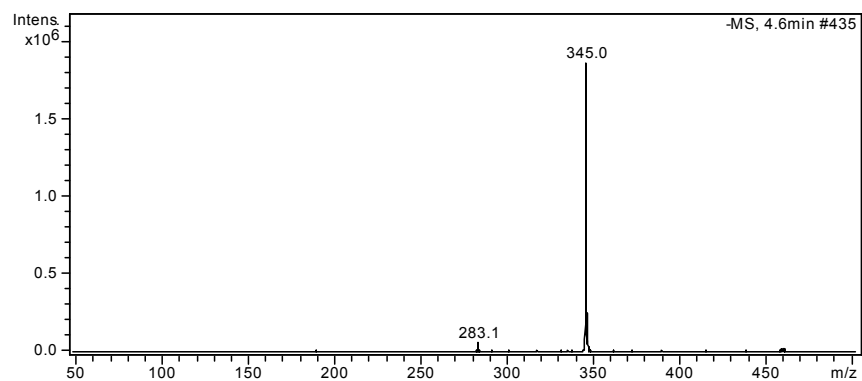


**Figure S2: MS of major ingredients in the RE extract with their retention time**

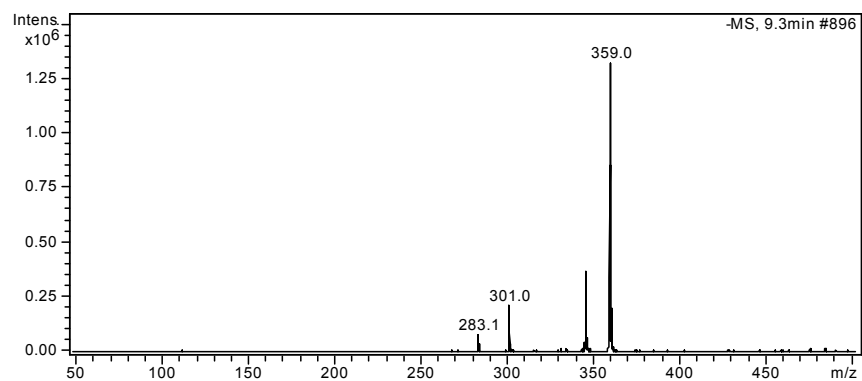
**Peak No: 1 (Rt: 4.3min, Proposed compound: Rosmanol)**



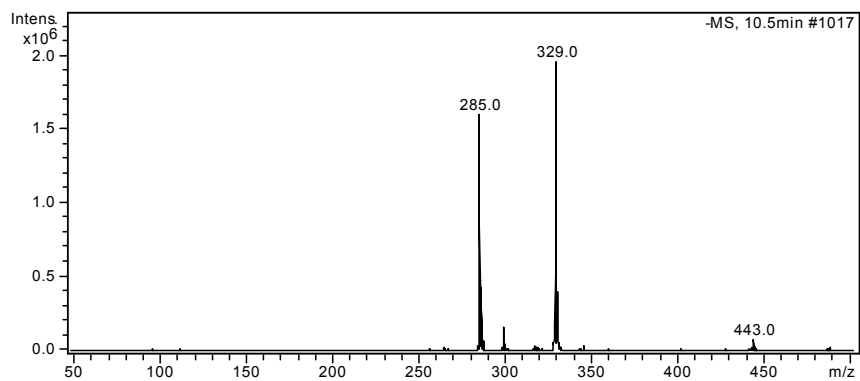
**Peak No: 2 (Rt: 4.6min, Proposed compound: Epirosmanol)**



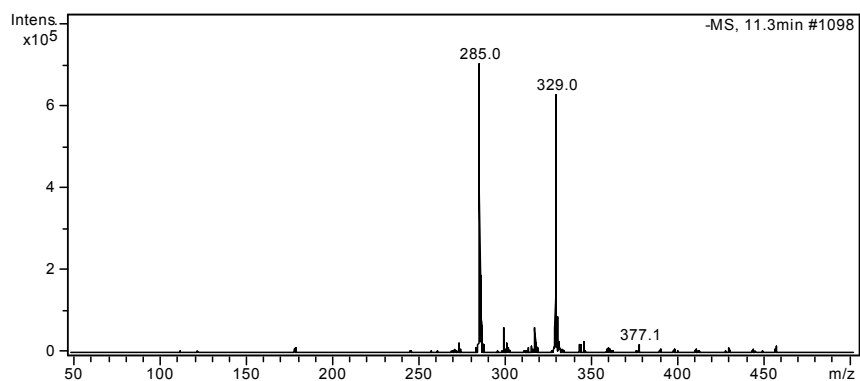
**Peak No: 3 (Rt: 9.3min, Proposed compound: Rosmanol methyl ether)**



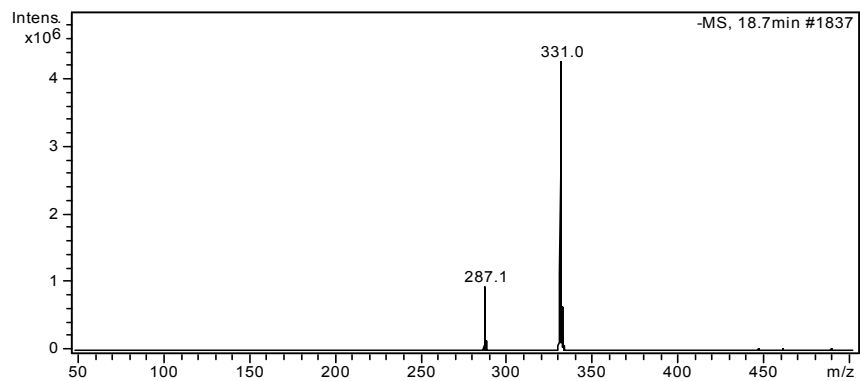
**Peak No: 4 (Rt: 10.5min, Proposed compound: Carnosol)**



**Peak No: 5 (Rt: 11.3min, Proposed compound: Carnosol isomer)**



**Peak No: 6 (Rt: 18.7min, Proposed compound: Carnosic acid)**



**Peak No: 7 (Rt: 20.1min, Proposed compound: methylcarnosate)**

