

**Essential oil from *Saussurea costus* inhibits proliferation and migration of Eca109 cells *via* mitochondrial apoptosis and STAT3 signaling**

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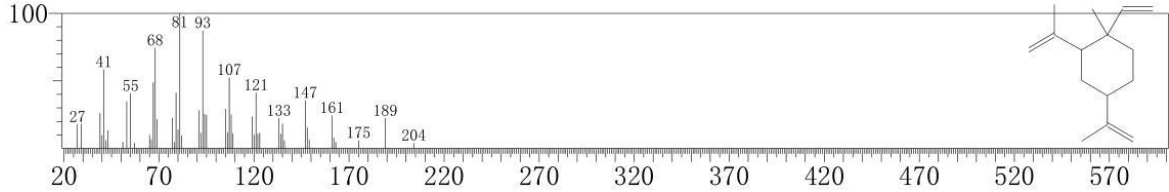
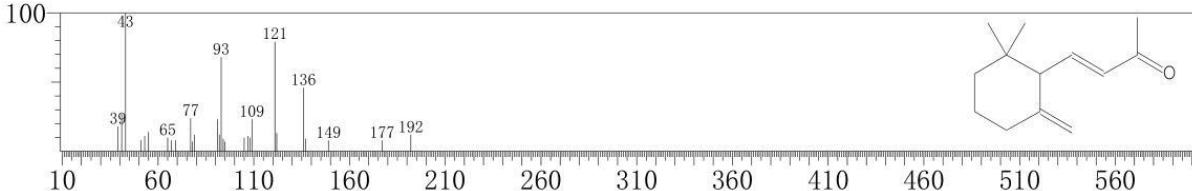
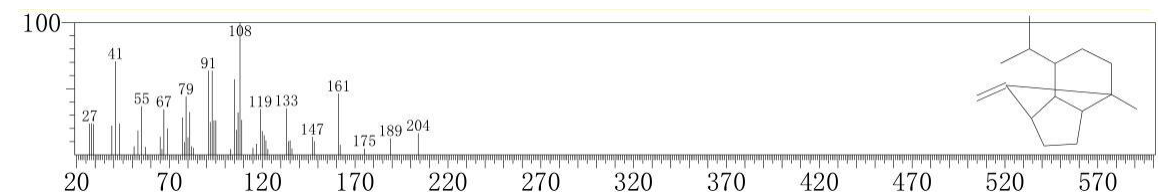
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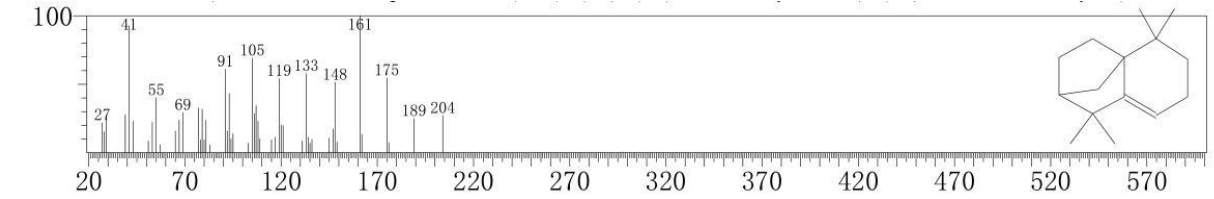
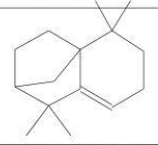
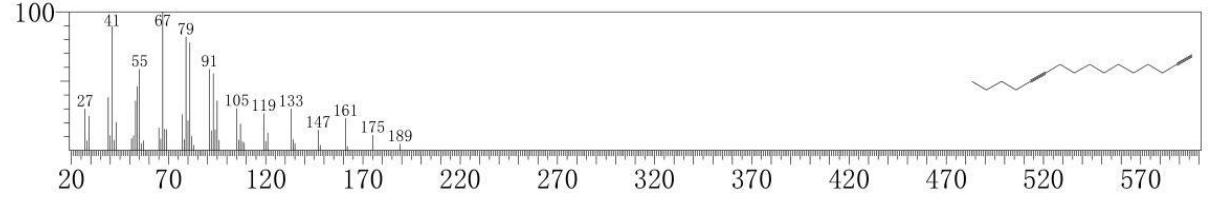

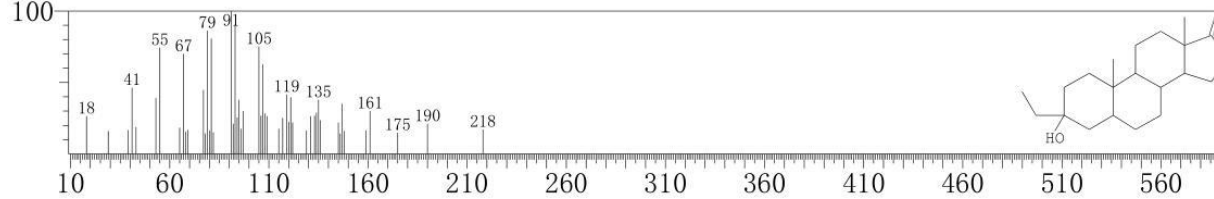
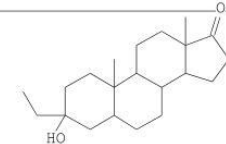
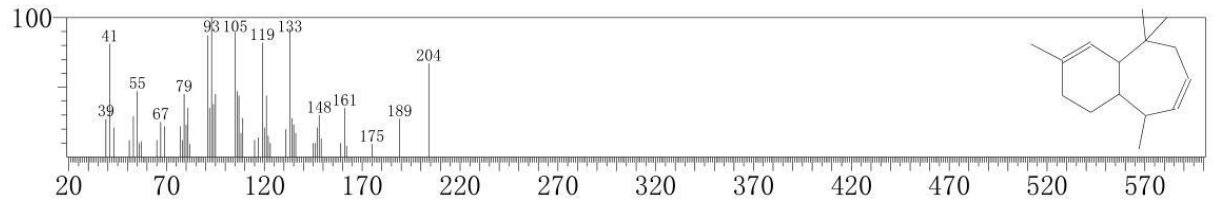
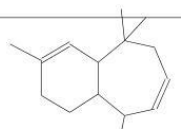
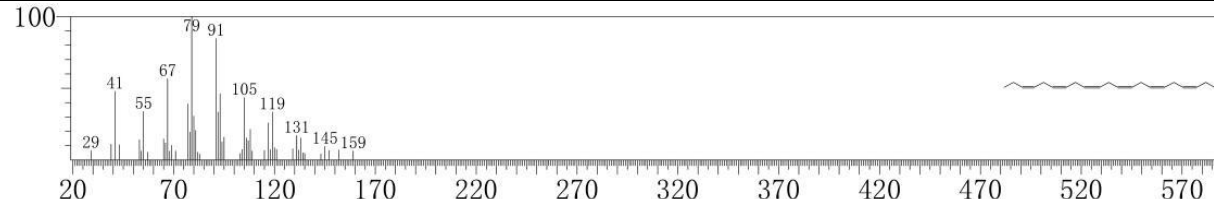

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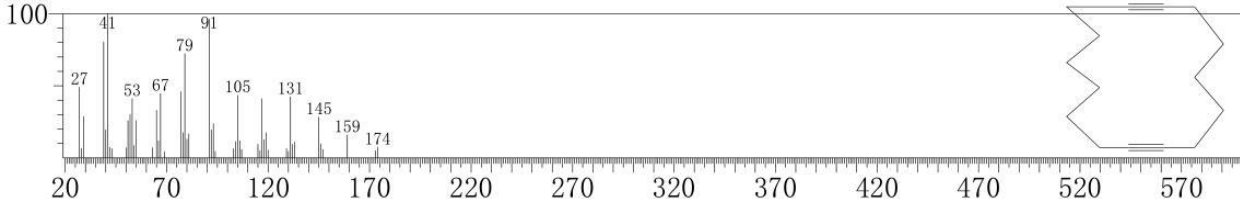
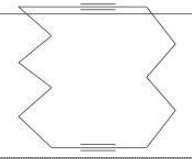
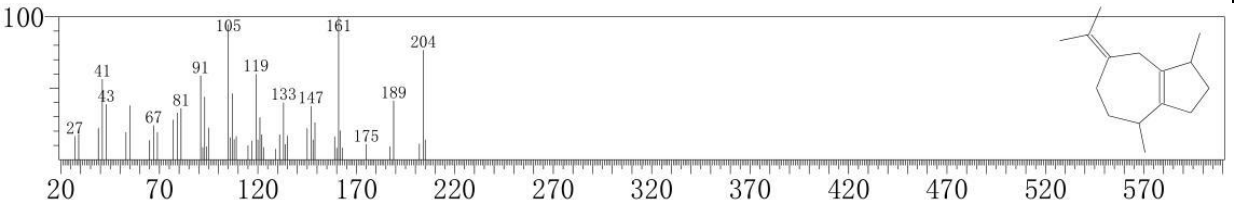
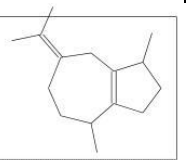
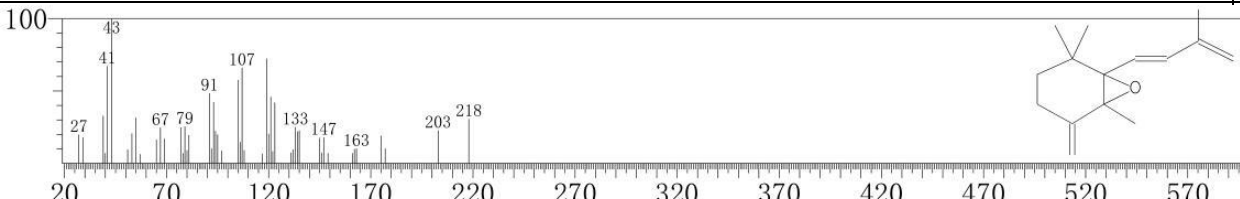
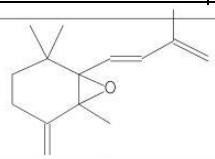
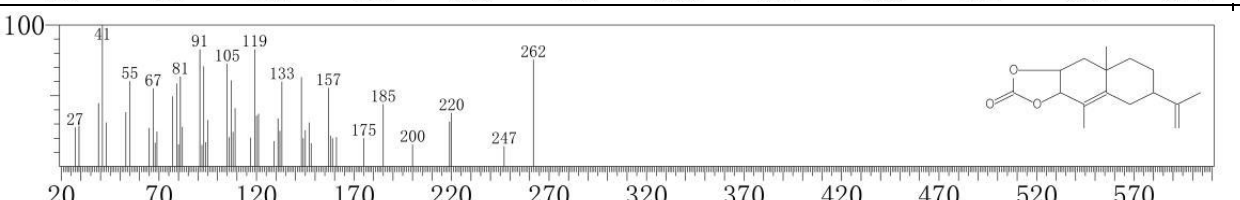
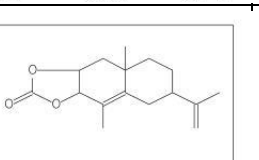
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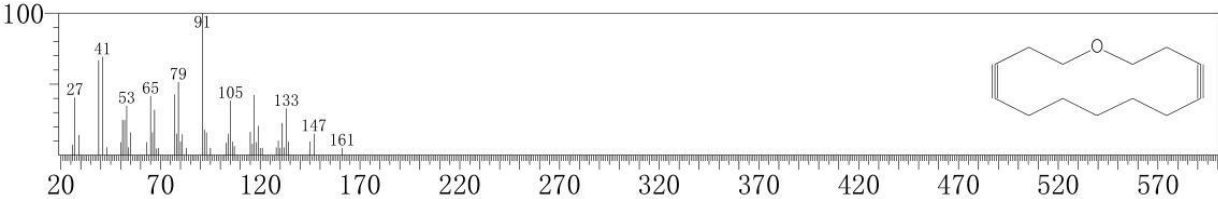
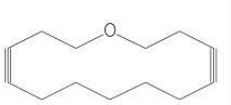
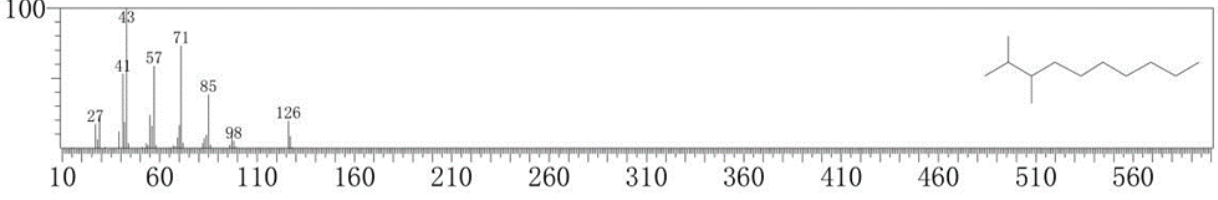
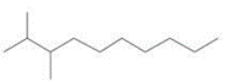
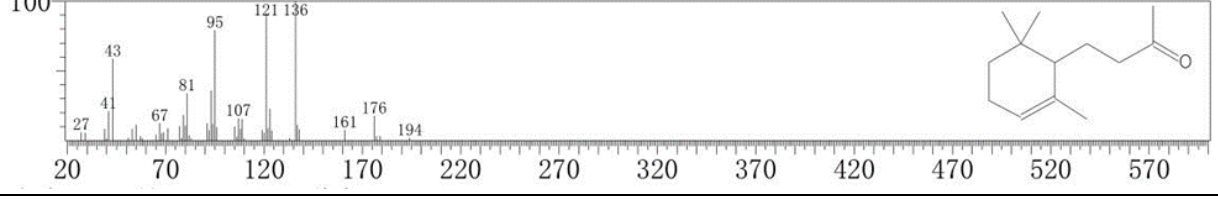
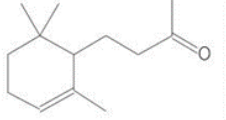
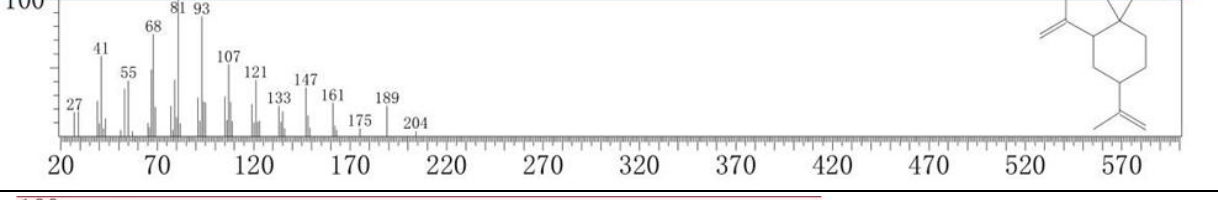
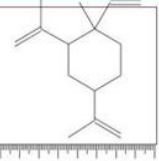
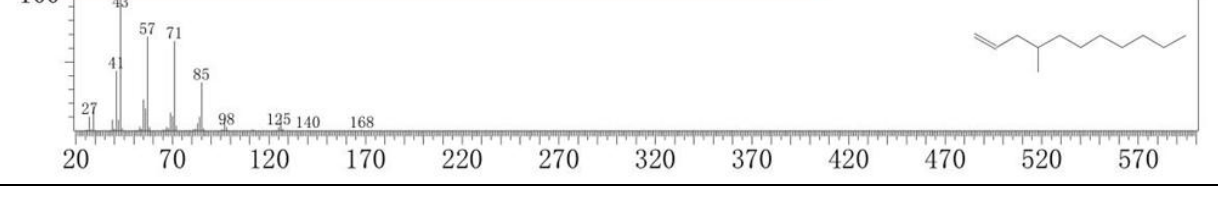
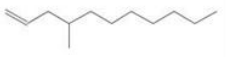
#These authors contributed equally to this study.

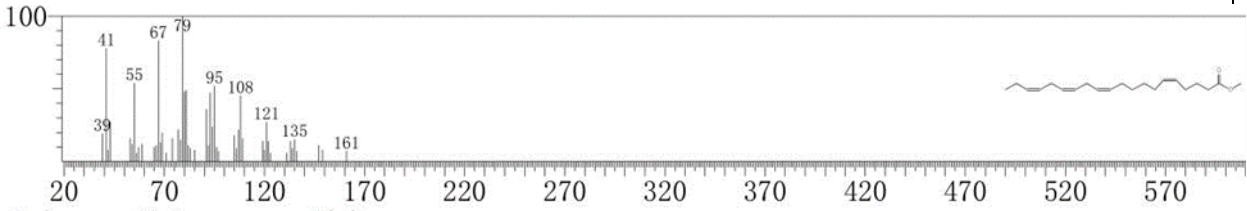
**Supplementary Table 1.** Primary chemical composition and mass spectra of the components in *Saussurea costus* essential oil by GC-MS analysis.

Peak <i>a</i>	Chemical name	Retention time (min)	Mass spectra	Formula	Relative abundance, %
1	Elemene	18.56		C <sub>15</sub> H <sub>24</sub>	0.83
2	γ-Ionone	19.19		C <sub>13</sub> H <sub>20</sub> O	0.85
3	Sativene	20.56		C <sub>15</sub> H <sub>24</sub>	0.52

4	Isolongifolene	21.74	 	$C_{15}H_{24}$	0.51
5	1,11-Hexadecadiyne	22.37	 	$C_{16}H_{26}$	0.91
6	3-Ethyl-3-hydroxy-androst-17-one	24.14	 	$C_{21}H_{34}O_2$	5.02
7	2,4a,5,6,9,9a-Hexahydro-3,5,5,9-tetramethyl-1H-benzocycloheptene	26.55	 	$C_{15}H_{24}$	3.40
8	Cis-4,7,10,13,16,19-docosaenoic acid	30.22	 	$C_{22}H_{32}O_2$	4.03

9	1,8-Cyclopentadecadiyne ne	31.54	 	$C_{15}H_{22}$	41.60
10	$\beta$ -Guaiene	34.10	 	$C_{15}H_{24}$	5.06
11	Oxabicyclo[4.1.0]heptane	35.23	 	$C_{15}H_{22}O$	13.80
12	3a,5,6,7,8,8a,9,9a-Octahydro-4,8a-dimethyl-6-(1-methylethenyl)-Naphtho[2,3-d]-1,3-dioxol-2-one	35.80	 	$C_{16}H_{22}O_3$	16.70

13	Oxacyclotetradeca-4-11 -diyne	37.15	 	$C_{13}H_{18}O$	2.61
14	2,3-Dimethyldecane	18.46	 	$C_{12}H_{26}$	<0.1
15	7,8-Dihydro- $\alpha$ -ionone	18.99	 	$C_{13}H_{22}O$	<0.1
16	$\beta$ -Elemen	21.74	 	$C_{15}H_{24}$	<0.1
17	4-Methyl-1-undecene	22.52	 	$C_{12}H_{24}$	<0.1

18	Cis-5,11,14,17-eicosatetraensaeuremethylester	24.07		C <sub>21</sub> H <sub>34</sub> O <sub>2</sub>	<0.1
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<sup>a</sup>Peak numbers refer to the numbers indicated in Figure 1. <sup>a</sup>Peaks 1-13 were the primary chemical components in *Saussurea costus* essential oil. The last five peaks could be detected by mass spectrometry but not by gas chromatography as their relative abundance was <0.1%.