Short Communication

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# Identification of Allicin (from fresh garlic) using ASAP (Atmospheric Solids Analysis Probe) Technique with a Compact Mass Spectrometer

**Sakulrat JJ[1], Nabila Perveen[2] and Naeem Hasan Khan[2]***

[1]*ACI Sciences (M) Sdn. Bhd., Malaysia*

[2]*Faculty of Pharmacy, AIMST University, Malaysia*

***Corresponding author:** Naeem Hasan Khan, Faculty of Pharmacy, AIMST University, 08100 Bedong, Kedah D.A., Malaysia

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## Objective

Detect and confirmofAllicin fromfreshgarlic usingthe massanalysis by Compact Mass [1-5].

## Method

### Equipment

**Atmospheric Solids Analysis Probe(ASAP)Technique:** Figure 1.

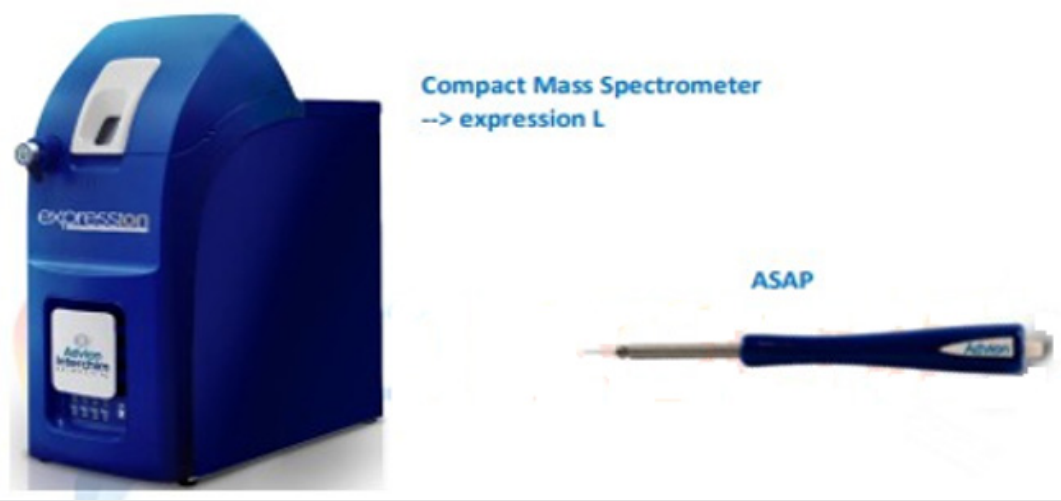



**Figure 1.**

### Targeted Compound

Figure 2.

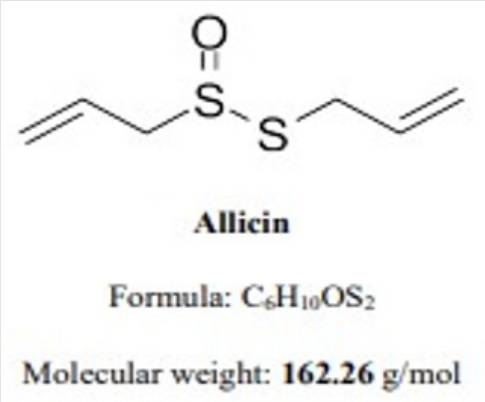



**Figure 2.**

### Screening Method

**ASAP Technique:** We will dipping the closed end of the capillary intothe samples inpowder form,and then place the capillary into the CMS for analysis

## Result and Discussion

### Fresh Garlic Sample

**Scan Mode:** Figure 3.

**SIM Mode:** Figures 4 & 5.

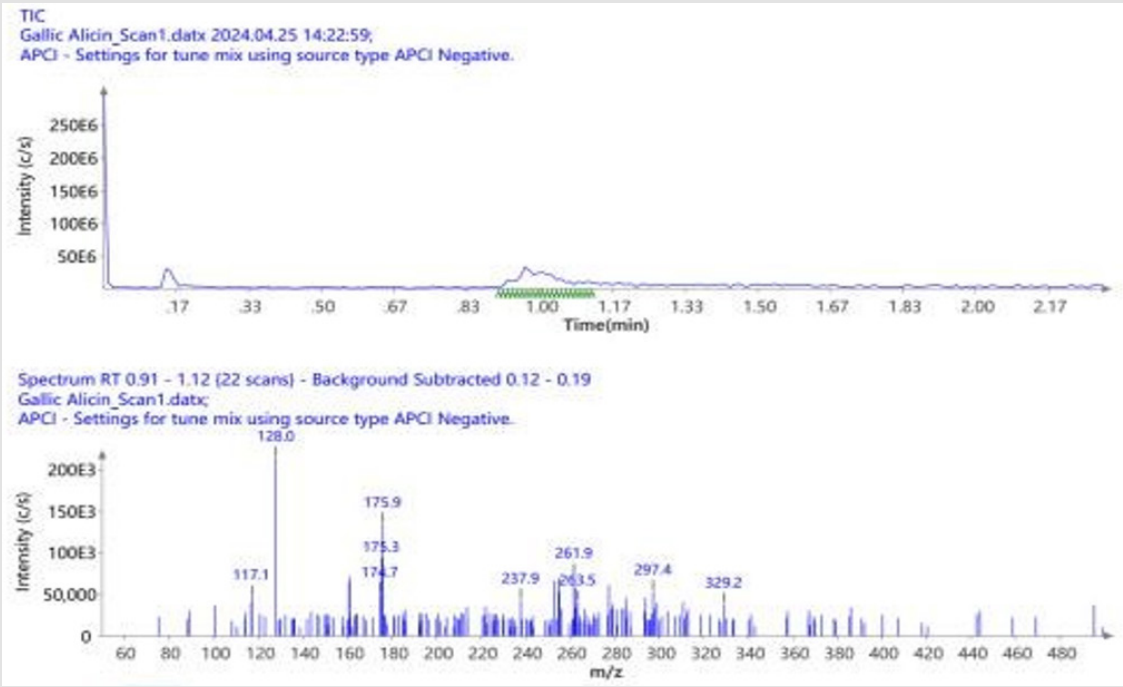
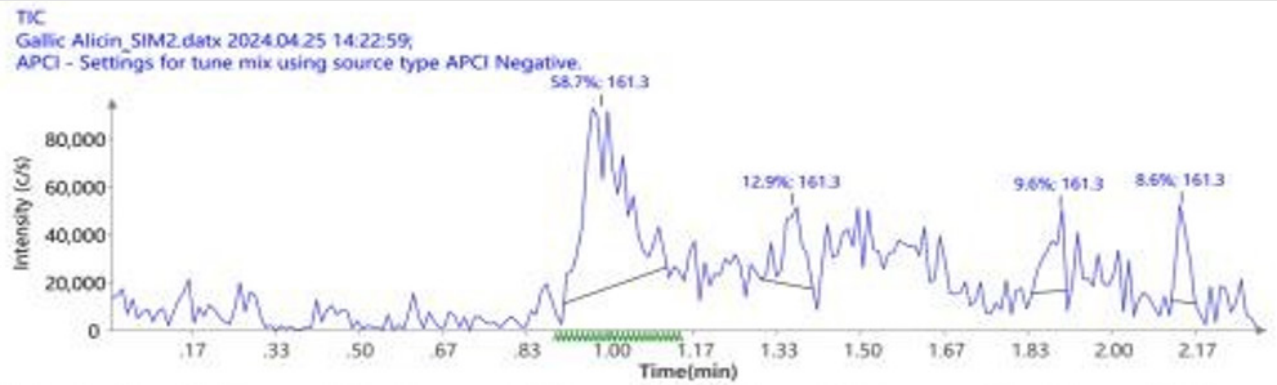



**Figure 3.**




| Time (Peak Maximum M:S/Minutes) | Maximum Intensity (c/s) | Time (Peak Centroid M:S/Minutes) | Peak Area | % Peak Area | Peak Resolution | Base Peak Mass (m/z) | Label |
|---|---|---|---|---|---|---|---|
| 0.97 | 7.8E4 | 0.98 | 4.1E5 | 58.7 | 5.1 | 161.3 | |
| 1.37 | 3.3E4 | 1.36 | 9E4 | 12.9 | 2.3 | 161.3 | |

**Figure 4.**

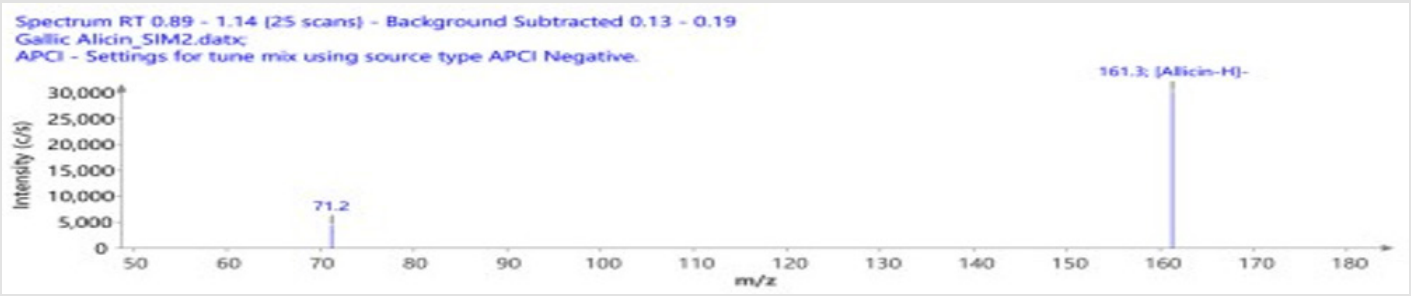



**Figure 5.**

## Discussion

The analysis mode results indicate the presence of Allicin, as evidenced by the signal observed at 161.3 m/z corresponding to the deprotonated molecular ion. However, the signal of interested compound for the sample (fresh garlic) is rather low. To enhance the signal intensity, the compound requires an extraction and purification process [5-10].

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## Conflict of Interests

Authors declare that there is no conflict of interests.

## Acknowledgment

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**Naeem Hasan Khan.** Biomed J Sci & Tech Res



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