

### Identification of Allyl isothiocyanate in Extracts of Jeju Radish using Various Solvents

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Radish is an important food vegetable that is consumed worldwide. Allyl isothiocyanate (AITC; 3-isothiocyanato-1-propene or 2-propenyl isothiocyanate) is a promising cancer preventive agent which is found abundant in radish. Therefore, the aim of this study was to identify and quantify AITC from the extract of different part (root and leaf) of Jeju radish using different solvent like hexane, methanol/acetone and dichloromethane. The ratio of material and sample was 1:10 (w/v). AITC was identified by gas chromatography front inlet detector (GC-FID). AITC peak was found in all jeju radish extracts and the retention time of AITC peak was 12.077 min by GC-FID which were similar to the standard AITC peak. AITC content in leaf and root extract was 0.135 and 86.57 ppm by hexane, 0.158 and 88.45 ppm by acetone/methanol and 0.078 and 44.77 ppm by dichloromethane, respectively highest amount of AITC was obtained in acetone/methanol extract. Therefore, identified AITC can be used in the food and pharmaceutical industries.