

Indole-3-Butyric Acid Analyzed with HPLC – AppNote

A Reproducible Method for Detection of a Plant Hormone

Click [HERE](#) for Column Ordering Information.

A rapid, sensitive, and Reproducible Method has been developed for Analysis of Indole-3-Butyric Acid. The data below, (*overlay of 10 chromatograms*) illustrates how the compound can be adequately Retained and detected using a simple Gradient in Reversed Phase HPLC. The Method demonstrates good Peak Shape and run-to-run Precision with RSD values less than 0.3%.

A Phenyl ring in the Column Stationary Phase provides beneficial π - π Interaction with the Analyte making possible the use of a very simple, Mass Spec friendly Mobile Phase with Formic Acid as an additive.



10 Injections of Indole-3-Butyric Acid Overlay



Method Conditions

Column: Cogent Phenyl Hydride™, 4 μ m, 100Å

Dimensions: 4.6mm x 75mm



Mobile Phase:

A: DI Water with 0.1% Formic Acid (v/v)

B: Acetonitrile with 0.1% Formic Acid (v/v)

Gradient:

Time (minutes)	%B
0	25
1	25
5	85
6	85
7	25
10	25

Injection vol.: 1 μ L

Flow rate: 1.0mL / minute

Detection: UV @ 280nm

Sample Preparation: Indole-3-Butyric Acid prepared as 1.0mg / mL standard solution in (50:50) Acetonitrile / DI Water

Notes: Indole-3-Butyric Acid a substance that is closely related in structure and function to a natural growth regulator found in plants. Indole-3-butyric acid is used

MICROSOLV TECHNOLOGY CORPORATION
HPLC Columns and Chromatography Accessories



on many crops and ornamentals to promote growth and development of roots, flowers and fruits, and to increase crop yields.

COGENT
HPLC Columns™