

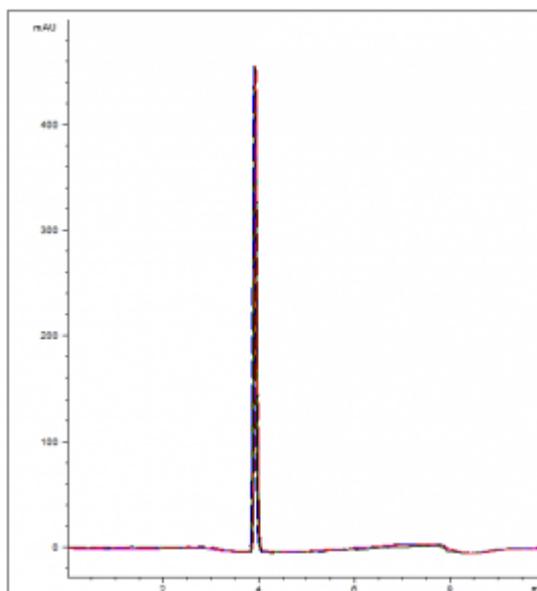
## Indole-3-Butyric Acid Analyzed with HPLC - AppNote

### A Reproducible Method for Detection of a Plant Hormone

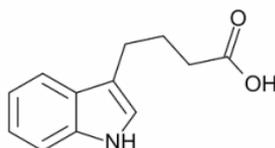
Click [HERE](#) for Column Ordering Information.

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  $\pi$ - $\pi$  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



Indole-3-Butyric Acid

### Method Conditions

**Column:** Cogent Phenyl Hydride™, 4  $\mu$ m, 100 Å

**Dimensions:** 4.6 x 75 mm

**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 µL  
**Flow rate:** 1.0 mL / minute  
**Detection:** UV @ 280 nm

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

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

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