

Product Name: Indole-3-butyric acid

Product Number: I015

CAS Number: 133-32-4

Molecular Formula: $C_{12}H_{13}NO_2$

Molecular Weight: 203.24

Form: Powder

Appearance: Off white Solid

Melting Point: 124-126 °C

Storage Conditions: 2-8 °C

Description: Indole-3-butyric acid (IBA) is a naturally occurring plant hormone of the auxin family. IBA is insoluble in water but is typically solubilized in > 70% alcohol.

This product is considered a dangerous good. Quantities above 1 g may be subject to additional shipping fees. Please contact us for specific questions.

Plant Biology Applications

Auxins are used in plant tissue culture to modulate general root and shoot architecture, organ patterning, vascular development and growth in tissue culture and tropic responses to light and gravity. IBA is typically used to induce rooting when propagating plants by striking or cutting. In addition, IBA has proven to facilitate fruit ripening after absorption into the plant. In one study, IBA was shown to promote adventitious rooting (roots forming in atypical locations) in Arabidopsis stem segments (Town, 2005).

References:

Ludwig-Müller J., 2005. Indole-3-butyric acid synthesis in ecotypes and mutants of Arabidopsis thaliana under different growth conditions. Journal of Plant Physiology 164 (2007) 47—59

Town, Christopher D., and Et Al. "Analysis of Indole-3-butyric Acid-induced Adventitious Root Formation on Arabidopsis Stem Segments." Journal of Experimental Botany 56.418 (2005): 2095-105. Oxfordjournals.org. 27 Apr. 2005. Web. 11 Sept. 2012.

Woodward A.W and Bartel B., 2005. Auxin: Regulation, Action, and Interaction. Annals of Botany 95: 707–735, 2005.