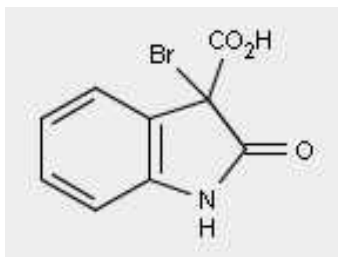




Product Information Sheet

A147

Auxindole™



Synonym: 3-Methyleneoxindole; 3-Bromooxindole-3-acetic Acid
CAS: N/A
Formula: C₁₀H₈BrNO₃
Molecular Wt: 269.9

Properties

Form: Powder
Appearance: Yellow to Pale Green Powder
Application: Auxin
Solubility: EtOH
Typical Working Concentration: Auxindole™ is a relatively new product and has been tested with few species in few applications. Initial results indicate that concentrations of not more than 0.01 μM are optimum for Stage II growth, and concentrations of 0.1-10 μM are optimum for Stage III. Concentrations exceeding 0.01 mM are inhibitory.
Storage Temp: -20 to 0° C
Storage Temp of Stock Solution: MO solutions prepared in agar can be refrigerated for at least one month with full retention of auxin activity. For longer storage, store at -20 to 0° C.
Other Notes: Plant Tissue Culture Tested

Auxindole™ is the trade name of 3-bromooxindole-3-acetic acid. In aqueous solutions Auxindole™ is instantaneously and quantitatively converted to 3-methyleneoxindole [(MO); (FW = 145)].

MO polymerizes readily at concentrations of 1 mM or higher; stock solutions should be diluted as soon as possible.

Because MO is a potent sulfhydryl reagent it forms adducts with sulfhydryl (-SH) compounds and sulfur-containing nucleophiles; therefore, such compounds should not be used as solvents or buffer components. The use of dimethyl sulfoxide (DMSO) as solvent is particularly discouraged.

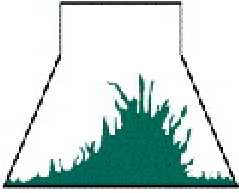
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MO is sensitive to pH extremes. The biological activity of MO is best demonstrated between pH 5.7 and 6.8.

Application Notes

Please Note: While *PhytoTechnology Laboratories™* tests each lot of this product with two or more plant cell/ tissue culture lines, it is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

Preparation of 1 mM stock solution (10 mL) and subsequent serial dilution

1. Weigh 2.7 mg of Auxindole™ and place in a test tube.
2. Dissolve with 0.2 mL of 95% ethanol and immediately dilute with 9.8 mL distilled water or suitable buffer. At this stage Auxindole™ is completely converted to MO.
3. Serially dilute stock solution to desired concentration. Ten-fold serial dilutions are most convenient to prepare.
4. For use in micropropagation, MO can be serially diluted in liquefied agar medium and autoclaved at 121°C for 20 minutes without loss of auxin activity or structural integrity. Alternatively, stock solutions of MO can be sterilized by filtration before serial dilution.

References

Auxindole™ is a trademark of Ceres Scientific Products, a division of Natural Science Inc. who provided this information.

Revised 2/2008