

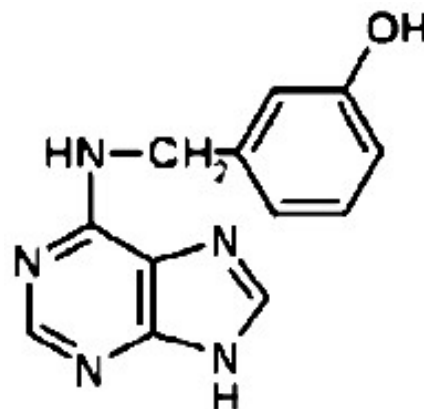
Product Information Sheet

T841 *meta*-Topolin

Synonyms: 6-(3-Hydroxybenzylamino)purine
 CAS: N/A
 Formula: C₁₂H₁₀N₅OH
 Mol. Weight: 241.5

Properties

Form: Powder
 Appearance: Cream to Yellow Powder
 Application: Plant Growth Regulator; Cytokinin
 Solubility: Soluble in 1N KOH
 Storage Temp: -20 to 0 °C
 Stock Solution Storage Temp: -20 to 0 °C
 Typical Working Concentration: Varies by application. Concentration should be determined by end user.
 Other Notes: Plant Tissue Culture Tested; For Research Use Only



Application Notes

meta-Topolin, derived from poplar leaves, is a highly active aromatic cytokinin. In the studies of wheat senescence and tobacco callus bioassay, *meta*-Topolin is found to be the most active with the highest cytokinin activity when compared to other aromatic cytokinins, such as BA and Zeatin.¹

Typical working concentration of *meta*-Topolin varies by plant species. It has been reported that a concentration of 5.0 µM is optimum for inducing regeneration and rooting of *Aloe polyphylla*.² For other species such as *Pelargonium* that has been treated with 0.5 to 1 mg/L of *meta*-Topolin yield the highest multiplication rate with high quality shoots.³

PhytoTechnology Laboratories® also carries *meta*-Topolin Solution (1 mg/mL), Product No. T7885.

Please Note: *meta*-Topolin may be heat labile. Add *meta*-Topolin aseptically to autoclaved medium that has been cooled enough to handle. 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.

References

1. Werbrouck, Stefaan P.O., Miroslav Strnad, Henry A. Van Onckelen, and Pierre C. Debergh. 1996. *Meta*-topolin, an alternative to benzyladenine in tissue culture? *Physiologia Plantarum*. 98:291-297.
2. Bairu, Michael W., Wendy A. Stirk, Karel Dolezal, and Johannes Van Staden. 2007. Optimizing the micropropagation protocol for the endangered *Aloe polyphylla*: can *meta*-topolin and its derivatives serve as replacement for benzyladenine and zeatin? *Plant Cell Tissue Organ Culture*. 90:15-23.
3. Wojtania, Agnieszka. 2010. Effect of *meta*-topolin on in vitro propagation of *Pelargonium x Hortorum* and *Pelargonium x Hederaefolium* cultivars. *ACTA Societatis Botanicorum Poloniae*. 79(2):101-106.

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