

WPM Medium (without Calcium Nitrate, 2.14g/L)

Cat. No.: W1524322 | Pack size: 250g | Storage: Protected from light, Room temperature

Overview

WPM (Woody Plant Medium) was developed by Lloyd and McCown specifically for the in-vitro culture of woody plants. Compared with MS medium, it has substantially reduced total-salt and ammonium-ion concentrations, which better matches the nutritional requirements of woody plants.

This product is a custom-modified version of WPM with calcium nitrate removed from the original formula. The recommended powder dosage is 2.14 g/L. This design effectively prevents adverse effects such as excessive calcium-ion precipitation and nitrate stress, making it suitable for special experimental systems including calcium modulation and calcium-stress studies. It is widely used in tissue-culture research of woody plants for shoot proliferation, callus induction, subculture and rooting. This product does not contain calcium nitrate. Users must supplement calcium sources according to their experimental protocols when preparing the medium; otherwise, calcium deficiency may lead to abnormal plant growth. For research use only. Not for use in food products or clinical diagnostics.

Product Composition:

Component	(mg/L)
Ammonium salt	400
Potassium sulfate	900
Magnesium sulfate	370
Potassium dihydrogen phosphate	170
Calcium chloride	96
Manganese sulfate	22.5
Zinc sulfate	8.6
Boric acid	6.2
Copper sulfate	0.25
Sodium molybdate	0.25

Component	(mg/L)
Ferrous sulfate	27.3
Ethylenediaminetetraacetic acid (EDTA)	37.3
Thiamine hydrochloride (Vitamin B1)	1
Pyridoxine hydrochloride (Vitamin B6)	0.5
Nicotinic acid (Vitamin B3)	0.5
Glycine	2
Inositol	100

Instructions for Use:

1. Accurately weigh 2.14g of this product and 0.56g of calcium nitrate, add both to 1L of distilled water, stir until the powders are fully dissolved to prepare a homogeneous culture medium solution.
2. Sterilize the solution via autoclaving at 116°C for 30 minutes. After sterilization, let it cool naturally in a clean environment, and the medium is then ready for plant tissue culture experiments.

Precautions:

1. The pH value shall be adjusted as required.
2. Dissolve the powder in room-temperature water prior to autoclaving; heating for dissolution is not recommended.
3. Store at room temperature away from light; shelf life is 3 years.
4. This plant tissue culture medium adopts a full inorganic salt formula. Minor precipitation may occur after sterilization.
5. This product is for research use only. Do not use it for pharmaceutical purposes, clinical diagnosis or treatment, food production, cosmetics manufacturing or other related applications. Do not store it in residential areas.
6. Our company shall not be liable for any accidents arising from improper use of this product.

Specifications

Specification	Details
Synonyms	Woody Plant Medium (without calcium nitrate)
Specifications & Purity	BioReagent, Suitable for plant cell culture
Sensitivity	Light-sensitive
Stability And Storage	Store at room temperature long term (36months). Store in the dark.
Storage	Protected from light, Room temperature
Shipped In	Normal
Grade	BioReagent, Suitable for plant cell culture

Contact & Global Offices

Whether you have a technical question, need help with a quotation, or want to inquire about an order, our regional teams are ready to assist. Please contact the office for your region; for general inquiries, the North American office is the corporate primary.

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Limitations & Disclaimer

- ☐ For Research Use Only (RUO). Not for use in human or animal diagnostics, therapeutics, or in vivo applications. Not for food, cosmetic, or household use.
- ☐ This product is not a CE-marked in vitro diagnostic device under IVDR (EU) 2017/746 and is not an FDA-cleared device under 21 CFR. Use is restricted to verified businesses, institutions, and qualified professionals for research and development purposes.

- ☐ Where any kit component is classified as hazardous under CLP (EC) 1272/2008 or OSHA HCS (29 CFR 1910.1200), the product Safety Data Sheet (SDS) takes precedence over this document for handling, storage, and disposal information.
- ☐ Performance depends on sample type, sample condition, handling, and operator technique. Users are responsible for validating the kit for their specific application.
- ☐ Aladdin product labels, SDS, COA, and approved specifications take precedence over this document. If product formulation, label, SDS, storage conditions, pack size, or quality specifications change, this document would be reviewed and reissued.