

## Modified Hoagland Hydroponic Medium (Nitrogen-Free, without Calcium Nitrate)

Cat. No.: M1524328 | Pack size: 250g | Storage: Protected from light, Room temperature

### Overview

This product is a precisely modified formulation of the classic Hoagland nutrient solution. Nitrogen and calcium nitrate are removed, while the proportions of all other nutrients remain balanced. It offers a single experimental variable, extremely low interference and excellent reproducibility. Featuring high solubility, good system stability and low precipitation tendency, it is widely used in research experiments on plant nutrition, compatible with various cultivation methods including hydroponics, and is a commonly used specialized culture solution for plant physiology studies.

### Product Composition:

| Component                                 | (mg/L)  |
|-------------------------------------------|---------|
| Potassium chloride                        | 152.828 |
| Dipotassium hydrogen phosphate trihydrate | 456.638 |
| Magnesium sulfate heptahydrate            | 246.48  |
| Sodium ferric EDTA                        | 11.17   |
| Boric acid                                | 1.546   |
| Manganese sulfate monohydrate             | 0.338   |
| Copper sulfate                            | 0.125   |
| Zinc sulfate monohydrate                  | 0.576   |
| Sodium molybdate                          | 0.102   |

### Usage Instructions:

1. Accurately weigh 0.635g of this product, add both into 1L of distilled water and stir until the powders are completely dissolved to prepare a homogeneous culture medium solution.

2. Sterilize via high-pressure steam at 116°C for 30 minutes. After sterilization, place the medium in a clean environment for natural cooling before use in plant tissue culture experiments.

## Precautions:

1. Store at room temperature away from light; shelf life is 3 years.
2. This plant tissue culture medium adopts a full inorganic salt formula. A small amount of precipitate may form after sterilization.
3. This product is for research purposes only. Do not use it for medicine, clinical diagnosis or treatment, food, cosmetics or other applications. Do not store it in residential areas.
4. Our company shall not be liable for any accidents arising from improper use of this product.

## Specifications

| Specification           | Details                                                            |
|-------------------------|--------------------------------------------------------------------|
| Specifications & Purity | BioReagent, Suitable for plant cell culture                        |
| Stability And Storage   | Store at room temperature long term (36months). Store in the dark. |
| Sensitivity             | Light-sensitive                                                    |
| Storage                 | Protected from light, Room temperature                             |
| Shipped In              | Normal                                                             |

## 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

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- ☐ 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.