

# CERTIFICATE OF ANALYSIS

Product Description MURASHIGE & SKOOG BASAL MEDIUM W/ VITAMINS  
Product Number M519  
Lot Number HAG0519519  
Storage Temperature 2-8°C

## Physiochemical Specifications:

| TEST                                    | SPECIFICATION                              | RESULTS                     |
|-----------------------------------------|--------------------------------------------|-----------------------------|
| Solubility                              | Soluble in Water                           | Passes                      |
| pH (4.43 g/L)                           | 3.5 – 4.5                                  | 3.9                         |
| Physical Appearance<br>Color*           | 2022-70 to 2026-70, PM-1 to PM-4, or PM-19 | PM-1 White                  |
| Texture                                 | Fine Powder                                | Fine Powder                 |
| Solution Appearance<br>Clarity<br>Color | Clear<br>Colorless to Slight Yellow Tint   | Clear<br>Slight Yellow Tint |
| Average Time to Dissolve                | For Information Only<br>(Approx. 3 min)    | Passes                      |
| Insolubles                              | None                                       | Passes                      |
| Moisture                                | For Information Only                       | 2.10%                       |

\* Product color based upon comparisons between sample and standardized color wheel (Benjamin Moore® Color Preview™).

## Biological Testing:

| TEST SPECIFICATION                                                                                                                                         | PLANT CELL LINE       | RESULTS |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------|
| Supports and/or facilitates plant growth and/or shoot proliferation in two or more plant tissue cultured lines with no morphological aberrations to plants | Xanthi Tobacco Callus | Passes  |
|                                                                                                                                                            | Parrot Feather        | Passes  |

The material described in this certificate was manufactured in the United States of America and is synthetic. No animal- or plant-derived components were used in the manufacture of this product.

**PhytoTech Labs Inc. provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. PhytoTech Labs Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.**

Date of Release: 20-July-2026

Recommended Shelf-Life Date: July 2029

Prepared by:   
Alex Lambert  
Lead Quality Control Laboratory Technician