

# CERTIFICATE OF ANALYSIS

Product Description MURASHIGE & SKOOG BASAL MEDIUM W/ VITAMINS  
Product Number M519  
Lot Number AGK0519213  
Storage Temperature 2-8°C

## **Physiochemical Specifications:**

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water	Passes
pH (4.43 g/L)	3.5 – 4.5	3.8
Physical Appearance Color*	2022-70 to 2026-70, PM-1 to PM-4, or PM-19	PM-1 Off White
Texture	Fine Powder	Fine Powder
Solution Appearance Clarity	Clear	Clear
Color	Colorless to Slight Yellow Tint	Slight Yellow Tint
Average Time to Dissolve	For Information Only (Approx. 3 min)	Passes
Insolubles	None	Passes
Moisture	For Information Only	1.58%
Osmolality	For Information Only	101 mOsm

\* 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	African Violet	Passes
	Tobacco Callus	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: 11-October-2019  
Recommended Shelf Life Date: October-2022



David S. Hart  
Technical Services Manager

**PhytoTech Labs Inc.**  
14610 W 106<sup>TH</sup> St. Lenexa, KS 66215  
Phone: 1-888-749-8682 or 1-913-341-5343  
Fax: 1-888-449-8682 or 1-913-341-5442  
Phytotechlab.com