

# CERTIFICATE OF ANALYSIS

Product Description      MURASHIGE & SKOOG MODIFIED VITAMIN SOLUTION (1000x)  
CONTAINS ADDITIONAL THIAMINE HCl  
Product Number          M557  
Lot Number                13K0557010  
Storage Temperature      2-6 °C

## Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Miscible with Water	Passes
pH (Neat)	3.2-4.2	3.6
Physical Appearance		
Color	Colorless	Colorless
Texture	Clear Liquid	Clear Liquid
Insolubles	None	Passes*
Sterility by USP<71>	Sterile	Passes

\*Myo-Inositol may precipitate out of solution as the product ages in cold storage. This will re-dissolve upon warming and does not detrimentally affect the product.

## Biological Testing:

Test Concentration: 1.0 mL/L

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	Tobacco callus	Passes
	Achimenes	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.

**PhytoTechnology Laboratories® provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. PhytoTechnology Laboratories® 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.**

Recommended Shelf Life Date: March 2016



Gary Seckinger, Ph.D.



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### **PhytoTechnology Laboratories®**

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