CERTIFICATE OF ANALYSIS

Product Description	CHOLECALCIFEROL USP GRADE (3β,5Z,7E)-9,10-Secocholesta-5,7,10(1()-trien-3-ol, Vitamin D ₃
Product Number	V883
Lot Number	12M0883007
Storage Temperature	2-6 °C
Molecular Weight	384.65
Formula	$C_{27}H_{44}O$
CAS Number	67-97-0

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in DMSO @ 1 mg/mL	Passes
Physical Appearance		
Color*	RM-1 to RM-4, RM-31 or	RM-31 White
	2143-70 to 2149-70	
Texture	Fine to Crystalline powder, may	Crystalline Powder
	have needle-like crystals	
Solution Appearance		
Clarity	Clear	Clear
Color	Colorless	Colorless
Average Time to Dissolve	Within 1 min	Passes
Insolubles	None	Passes
FTIR	Conforms to Structure	Passes
Purity	Minimum 98.0%	99.40%

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

Biological Testing:

TEST SPECIFICATION	PLANT CELL LINE	RESULTS
Supports and/or facilitates plant growth and/or shoot proliferation in two or	Cape Primrose	Passes
more plant tissue cultured lines with no morphological aberrations to plants	Syngonium	Passes

The material described in this certificate is synthetic. No animal- or plant-derived components were used in the manufacture of this product.

*Phyto*Technology 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. *Phyto*Technology 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: December 2017

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Gary Seckinger, Ph.D.



PhytoTechnology Laboratories®

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