



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Columbia Laboratories

**12423 NE Whitaker Way
Portland, OR 97230**

Fulfills the requirements of

ISO/IEC 17025:2017

and

**AOAC International – Guidelines for Laboratories Performing
Microbiological and Chemical Analysis of Food, Dietary Supplements, and
Pharmaceuticals – Revision August 2018**

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 06 January 2023

Certificate Number: AT-1508



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory
quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 AND
AOAC INTERNATIONAL – GUIDELINES FOR LABORATORIES
PERFORMING MICROBIOLOGICAL AND CHEMICAL ANALYSIS OF
FOOD, DIETARY SUPPLEMENTS, AND PHARMACEUTICALS –
REVISION AUGUST 2018**

Columbia Laboratories

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TESTING

Valid to: **January 6, 2023**

Certificate Number: **AT-1508**

Chemistry

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Allergens	Veratox S-ELISA	Food, Feed, and Dietary Supplements	Veratox S-ELISA
Gluten	AOAC 991.19 (Modified)	Food, Feed, and Dietary Supplements	Veratox S-ELISA
Cholesterol	AOAC 994.10 (Modified)	Food, Feed and Dietary Supplements	GC/FID
Total Fat	AOAC 922.06 (Modified)	Food, Feed and Dietary Supplements	Acid Hydrolysis
Total Fat	Internal Method – N209	Food, Feed and Dietary Supplements	Acid Hydrolysis / Soxhlet
Crude Fat	AOAC 2003.06 (Modified) AOAC 991.36 (Modified)	Food, Feed and Dietary Supplements	Soxhlet
Protein	AOAC 2001.11 (Modified)	Food, Feed and Dietary Supplements	Kjeldahl Distillation
Sugars	Food Chemistry 74 (2001) 499-505 (Modified)	Food, Feed and Dietary Supplements	GC/FID
Moisture and Solid	AOAC 925.10 (Modified)	Food, Feed, Dietary Supplements, Cannabis, and Hemp	Wet Chemistry

Chemistry

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Ash	AOAC 923.03 (Modified)	Food, Feed and Dietary Supplements	Wet Chemistry
Total Dietary Fiber	AOAC 991.43 (Modified)	Food, Feed and Dietary Supplements	Wet Chemistry
Fatty Acid Profile	AOCS Ce 1h-05 (Modified)	Food, Feed and Dietary Supplements	GC/FID
QuEChERS Pesticide Multi-Residue Extraction and Analysis	QuEChERS EN15662/AOAC 2007.1 (Modified)	Food, Feed, Dietary Supplements, Honey, Cannabis and Hemp	GC-FPD, GC-ECD, GC-XSD, GC/MS, GC/MS/MS, LC/MS/MS
Polar Pesticides Glyphosate & AMPA/ Glufosinate/ Fosetyl	QuPPE-Method, EU Reference Laboratory for Pesticides Requiring Single Residue Methods (EURL-SRM), Version 7, Dec. 2012	Food, Feed, Dietary Supplements, and Honey	LCMS/MS
Mycotoxins	QuEChERS EN15662/AOAC 2007.1 (Modified)	Food, Feed, Dietary Supplements, Cannabis, and Hemp	LC/MS/MS
Patulin	AOAC 995.10 (Modified)	Apple Juice/Sauce/Variants	HPLC
pH	AOAC 981.12 (Modified)	Food, Feed and Dietary Supplements	pH Electrode
Water Activity	AOAC 978.18 (Modified)	Food, Feed, Dietary Supplements, Cannabis, and Hemp	Aqualab Water Activity Meter
Heavy Metals: Arsenic, Cadmium, Lead, Mercury	AOAC 2013.06 (Modified)	Food, Feed, Dietary Supplements, Cannabis, and Hemp	ICP-MS
Minerals: Calcium, Iron, Sodium, Potassium, Phosphorus	AOAC 2011.14 (Modified)	Food, Feed and Dietary Supplements	ICP-OES
Vitamin D	Huang Et Al. RCIMS 2014, 28. pp. 2101-10	Food, Feed, and Dietary Supplements	UHPLC, LC/MS/MS
Sulfites	AOAC 990.28 (Modified)	Food, Feed and Dietary Supplements	Wet Chemistry
Antibiotics in Honey	JOAC International Vol. 85, No 4, 2002 pp. 853-860(8)	Honey	LC/MS/MS
Honey Color	Honey Color by Digital Photometer	Honey	Photometer
Free Acidity in Honey	IHC Free Acidity 2009 (Modified)	Honey	pH Electrode

Chemistry

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Electrical Conductivity in Honey	IHC Electrical Conductivity (Modified)	Honey	Conductivity Meter
Insoluble / Solids	IHC 2009 Insoluble Matter (Modified)	Honey	Gravimetric
Diastase	AOAC 958.09 Diastatic Activity (Modified)	Honey	Spectrophotometer
HMF	IHC 2009 5-Hydroxymethylfurfural (Modified)	Honey	HPLC/DAD
Moisture	IHC 2009 Moisture Refractometric (Modified)	Honey	Refractometer
Cannabinoids	JAOAC International, Vol. 98, No. 6, 2015 (Modified)	Cannabis, Hemp, and Cannabinoid Products	HPLC
Residual Solvents	EPA 5021A	Hemp and Cannabis Products	GC-MS/Headspace
Peroxide Value	ISO 3960 (Modified)	Food, Feed, and Dietary Supplements	FoodLab
Free Fatty Acids	ISO 3960 (Modified)	Food, Feed, and Dietary Supplements	FoodLab

Microbiological

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Aerobic Plate Count	AOAC 990.12	Food, Feed, Cannabis and Hemp	3M Petrifilm
<i>Bacillus cereus</i>	AOAC 980.31	Food, Feed and Dietary Supplements	Plate Count
Clostridium species	AOAC 976.30	Food, Feed and Dietary Supplements	Plate Count
Clostridium perfringens	AOAC 976.30	Food, Feed and Dietary Supplements	Plate Count
Coliforms / E. coli	AOAC 991.14	Food, Feed, Cannabis and Hemp	3M Petrifilm
Enterobacteriaceae	AOAC 2003.01	Food, Feed, Cannabis and Hemp	3M Petrifilm

Microbiological

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Lactic Acid Bacteria	AOAC 041701	Food, Feed and Dietary Supplements	Petrifilm
Pseudomonas spp.	ISO 13720	Food, Feed and Dietary Supplements	Plate Count
Staphylococcus aureus	AOAC 2003.07	Food, Feed	3M Petrifilm
Rapid Yeast & Mold	AOAC 2014.05	Food, Feed, Cannabis and Hemp	3M Petrifilm
Salmonella sp.	AOAC 2016.01	Food, Feed, Dietary Supplements, Cannabis and Hemp	3M Molecular Detection System
Listeria sp.	AOAC 2016.07	Food, Feed and Dietary Supplements	3M Molecular Detection System
Listeria monocytogenes	AOAC 2016.08	Food, Feed, Dietary Supplements, Cannabis and Hemp	3M Molecular Detection System
E. coli 0157 including H7	AOAC 2017.01	Food, Feed, Dietary Supplements, Cannabis and Hemp	3M Molecular Detection System
Cronobacter	Cronobacter by 3M Molecular Detection System	Food, Feed and Dietary Supplements	3M Molecular Detection System
Campylobacter	Campylobacter by 3M Molecular Detection System	Food, Feed and Dietary Supplements	3M Molecular Detection System
Listeria monocytogenes	AOAC 2019.11	Food, Feed, Dietary Supplements, Cannabis and Hemp	PCR
Listeria sp.	AOAC 2019.10	Food, Feed and Dietary Supplements	PCR
Salmonella	AOAC 2020.02	Food, Feed, Dietary Supplements, Cannabis and Hemp	PCR
E. coli O157:H7	AOAC 2019.03	Food, Feed, Dietary Supplements, Cannabis and Hemp	PCR
Aspergillus	Gene-UP Aspergillus PRO Test Kit reference IS1086	Cannabis, Hemp, and Cannabinoid Products	PCR
Cronobacter	AOAC 2018.01	Food, Feed, Dietary Supplements	PCR

Microbiological

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
EHEC	PTM 121806	Food, Feed, Dietary Supplements, Cannabis and Hemp	PCR

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-1508.



R. Douglas Leonard Jr., VP, PILR SBU

