



CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

Columbia Laboratories
12423 NE Whitaker Way
Portland, OR 97230

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2017

and the

**AOAC International Guidelines for Laboratories Performing
Microbiological and Chemical Analysis of Food, Dietary Supplements and
Pharmaceuticals (2015)**

while demonstrating technical competence in the field of

TESTING

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

AT-1508

Certificate Number

ANAB Approval

Certificate Valid Through: 01/06/2021
Version No. 014 Issued: 02/18/2020



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 (2015)

Columbia Laboratories

12423 NE Whitaker Way
Portland, OR 97230

Derrick Tanner 503-254-1794
Derrick.tanner@tentamus.com www.columbialaboratories.com

TESTING

Valid to: January 6, 2021

Certificate Number: AT-1508

Chemistry

Table with 4 columns: Specific Tests and/or Properties Measured, Specification, Standard, Method, or Test Technique, Items, Materials or Product Tested, Key Equipment or Technology. Rows include Allergens, Cholesterol, Total Fat, Crude Fat, Protein, Sugars, Moisture and Solid, Ash, Total Dietary Fiber, and Fatty Acid Profile.

Chemistry

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
QuEChERS Pesticide Multi-Residue Extraction and Analysis	QuEChERS EN15662/AOAC 2007.1 (Modified)	Food, Feed, Dietary Supplements, Cannabis and Hemp	GC-FPD, GC-ECD, GC-XSD, GC/MS, GC/MS/MS, LC/MS/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
Sorbic and Benzoic Acid	JAOAC 1995, 68, 488-492 (Modified)	Food, Feed and Dietary Supplements	HPLC
Sulfites	AOAC 990.28 (Modified)	Food, Feed and Dietary Supplements	Wet Chemistry
Honey Pesticide Profile	QuEChERS EN15662/AOAC 2007.1 (Modified)	Honey	GC-FPD, GC-ECD, GC-XSD, GC/MS, GC/MS/MS, LC/MS/MS
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
Cannabinoids	JAOAC International, Vol. 98, No. 6, 2015 (Modified)	Cannabis, Hemp, and Cannabis Products	HPLC
Vitamin D	Huang Et Al. RCIMS 2014, 28. pp. 2101-10	Food, Feed, and Dietary Supplements	UHPLC, 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
Moisture	IHC 2009 Moisture Refractometric (Modified)	Honey	Refractometer
Residual Solvents	EPA 5021A	Hemp and Cannabis Products	GC-MS/Headspace
Gluten	AOAC 991.19 (Modified)	Food, Feed, and Dietary Supplements	Veratox S-ELISA

Microbiology

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 966.23; FDA BAM Ch. 3	Food, Feed and Dietary Supplements	Plate Count
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	MPN
<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
Lactic Acid Bacteria	APHA CCMEF, Ch. 19 (Modified)	Food, Feed and Dietary Supplements	Plate Count
Listeria monocytogenes	AOAC RI 070401	Food, Feed and Dietary Supplements	PCR system
Pseudomonas spp.	ISO 13720	Food, Feed and Dietary Supplements	Plate Count
Salmonella spp.	AOAC RI 120301	Food, Feed and Dietary Supplements	PCR
Staphylococcus aureus	AOAC 2003.07	Food, Feed	3M Petrifilm

Microbiology

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Shiga toxin producing <i>E. coli</i> (STEC) Screen	ISO.TS 13136 2012	Food, Feed, Dietary Supplements, Cannabis, and Hemp	PCR
Shiga toxin producing <i>E. coli</i> (STEC) ID	ISO.TS 13136 2012	Food, Feed, Dietary Supplements, Cannabis, and Hemp	PCR
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 and Dietary Supplements	3M Molecular Detection System
<i>E. coli</i> 0157 including H7	AOAC 2017.01	Food, Feed and Dietary Supplements	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

Note:

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



Vice President