



Hill Laboratories

Hamilton

Client Number 590

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Authorised Representative

Ms Leisle Jacobsen
Quality Manager/Lead Auditor

Programme

Biological Testing Laboratory

Accreditation Number 1287

Initial Accreditation Date 16 November 2017

Conformance Standard

ISO/IEC 17025:2017

General requirements for the competence of testing and calibration laboratories

Laboratory Services Summary

Drugs and Pharmaceuticals

1.03 Drugs and Pharmaceuticals

Foods

1.11 Foods

1.71 Biological Condition

Waters

1.12 Waters

Molecular Biology

1.03 Drugs and Pharmaceuticals

1.11 Foods

1.62 Molecular Biology

1.71 Biological Condition

Key Technical Personnel

Drugs and Pharmaceuticals

Mrs Priya Babu 1.03

Mr Aarav Marwaha 1.03

Operations Manager
Authorisation:

Issue 24

Date:03/10/23

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CERTIFICATE OF ACCREDITATION



Mrs Shobhna Ram	1.03
Mr Kevin Wang	1.03
Ms Ester Woollaston	1.03
Foods	
Mrs Priya Babu	1.11, 1.71
Mr Aarav Marwaha	1.11, 1.71
Dr Eilidh Mowat	1.11, 1.71; selected
Mrs Shobhna Ram	1.11, 1.71
Mr Kevin Wang	1.11, 1.71
Ms Ester Woollaston	1.11, 1.71
Waters	
Mrs Priya Babu	1.12
Mr Aarav Marwaha	1.12
Mrs Shobhna Ram	1.12
Mr Kevin Wang	1.12
Ms Ester Woollaston	1.12
Molecular Biology	
Mrs Priya Babu	1.03, 1.11 (selected), 1.71
Ms Fiona Calvert	1.62; selected
Mr Jon Harris	1.62; selected
Dr Sara Loeffen	1.62; selected
Mr Aarav Marwaha	1.03, 1.11, 1.62 (selected), 1.71
Dr Eilidh Mowat	1.03, 1.11, 1.62, 1.71
Mrs Shobhna Ram	1.03, 1.11, 1.62 (selected), 1.71
Mr Kevin Wang	1.03, 1.11, 1.62 (selected), 1.71
Ms Ester Woollaston	1.03, 1.11, 1.62, 1.71

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Drugs and Pharmaceuticals

1.03 Drugs and Pharmaceuticals

(a) Microbiological quality (including sterility) (Cannabis)

Aerobic plate count	APHA 8.82 (modified)
Aerobic plate count	European Pharmacopoeia (Modified)
Bile Tolerant Gram Negative Bacteria	European Pharmacopoeia (Modified)
<i>E. coli</i>	European Pharmacopoeia (Modified)
<i>Pseudomonas aeruginosa</i>	European Pharmacopoeia (Modified)
Salmonella	European Pharmacopoeia (Modified)
Yeast & Mould (count)	APHA 21.51 (Modified)
Yeast & Mould (count)	European Pharmacopoeia (Modified)

Foods

1.11 Foods

- (a) Cereals and cereal products**
- (b) Edible oils, fats and derived products**
- (c) Nuts, fruits, vegetables and derived products**
- (d) Sauces, herbs, spices and condiments**
- (e) Sugar and sugar confectionery**
- (f) Dairy products**
- (g) Meat, poultry and derived products**
- (h) Fish and fish products**
- (i) Eggs and egg products**
- (k) Non-alcoholic beverages**
- (p) Canned foods**
- (q) Animal feeds**

The following tests are in accordance with APHA Compendium for the Microbiological Examination of Foods (5th Edition) methods unless were otherwise stated:

Aerobic Plate Count	6.523, 8.72
Aerobic Plate Count	6.524, 8.73
Aerobic Plate Count	8.82
Aerobic Plate Count (pour plate)	MIMM 6
Aerobic Plate Count (spread plate)	MIMM 6
Aerobic Plate Count (petrifilm)	MIMM 6
Aerobic Plate Count	TEMPO AC
<i>Bacillus cereus</i>	31

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<i>Bacillus cereus</i>	31 (modified)
<i>Bacillus cereus</i> (count)	TEMPO BC
Coliform (count)	TEMPO CC
<i>E. coli</i> (count)	TEMPO EC
<i>E. coli</i> – Petrifilm	9.935
<i>E. coli</i> – Petrifilm	MIMM 8.4
<i>E. coli</i> – MPN	9.93
Enterobacteriaceae	MIMM 8.2
Enterobacteriaceae	9.62 (modified)
Enterobacteriaceae	9.63 (modified)
Enterobacteriaceae (count)	TEMPO EB
Faecal Coliforms – MPN	9.81
Listeria (count)	ISO 11290-2 (2017)
Mould	21.51
Presumptive Coliforms – MPN	9.71
<i>Staphylococcus aureus</i>	39.6
<i>Staphylococcus aureus</i>	MIMM 7.8
<i>Staphylococcus aureus</i> (count)	TEMPO STA
Total Coliforms – MPN	9.72
Total Coliforms – Petrifilm	9.935
Yeast & Mould	21.51
Yeast & Mould	21.52
Yeast & Mould	21.51 (modified)
Yeast & Mould (count)	TEMPO YM

(k) Non-alcoholic beverages (syrops, juices)

Aciduric Plate Count	58.5 & 8.73
Aciduric Plate Count (MF using Orange Serum Agar)	6.54 / 58.552
Aerobic Plate Count (MF)	6.54
Yeasts & Moulds (MF)	21.51
Yeasts & Moulds (MF)	21.52
Xerophilic Yeast & Mould Counts (MF)	21.52

(n) Other specified fresh foods

Osmophilic fungi (count)	17.3
<i>Staphylococcus aureus</i>	39.6

(n) Other specified fresh foods

(o) Other specified preserved foods

Aerobic Plate Count	TEMPO AC
<i>Bacillus cereus</i> (count)	TEMPO BC
Coliform (count)	TEMPO CC
<i>E. coli</i> (count)	TEMPO EC
Enterobacteriaceae (count)	TEMPO EB

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<i>Staphylococcus aureus</i> (count)	TEMPO STA
Yeast & Mould (count)	TEMPO YM
Yeast & Mould	APHA 5 th Edition – Chapter 21.51 (modified)

1.71 Biological Condition

(b) Plant hygiene evaluation

The following tests are in accordance with APHA Compendium for the Microbiological Examination of Foods (5th Edition) methods unless were otherwise stated:

Aerobic Plate Count	8.82
Aerobic Plate Count	MIMM 6
Aerobic Plate Count	TEMPO AC
<i>Bacillus cereus</i> (count)	TEMPO BC
Coliform (count)	TEMPO CC
<i>E. coli</i> (count)	TEMPO EC
<i>E. coli</i> – Petrifilm	9.935
<i>E. coli</i> – Petrifilm	MIMM 8.4
Enterobacteriaceae	MIMM 8.2
Enterobacteriaceae	9.62 (modified)
Enterobacteriaceae	9.63 (modified)
Enterobacteriaceae (count)	TEMPO EB
Listeria count	ISO 11290-2 (2017)
<i>Staphylococcus aureus</i> (count)	TEMPO STA
Total Coliforms – Petrifilm	9.935
Yeast & Mould	21.51 (modified)
Yeast & Mould (count)	TEMPO YM

Waters

1.12 Waters

- (a) Potable waters**
- (b) Non-potable waters**
- (c) Sewage**
- (d) Effluent and trade wastes**
- (e) Cooling tower and industrial waters**
- (f) Swimming and spa pools**
- (g) Marine waters**

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The following tests are in accordance with APHA "Standard Methods for the Examination of Water and Wastewater" (Online Edition) except where otherwise indicated.

Aerobic Plate Count 22°C	MIMM 11.6
<i>E. coli</i> – MF	9222 I
<i>E. coli</i> – MPN	9221 F
<i>E. coli</i> – MPN(TBX)	9221 F (modified)
<i>E. coli</i> Colilert Quantitray (97 well)	9223 B (excluding marine)
<i>E. coli</i> Colilert Quantitray (51 well)	9223 B (excluding marine)
<i>E. coli</i> – Colilert-18 Quantitray (97 well)	9223 B
<i>E. coli</i> – Colilert-18 Quantitray (51 well)	9223 B
<i>E. coli</i> – P/A	9223 B Colilert
<i>E. coli</i> – Quantitray	MIMM 11.A1
Enterococci – Quantitray	MIMM 12.4
Enterococci – MF	9230 C (modified)
Faecal coliforms – MF	9222 D
Faecal coliforms – MPN	9221 E
Faecal coliforms – MPN	MIMM 11.A2
Heterotrophic plate count (22 °C, 25 °C, 30 °C, 35 °C, 37 °C)	9215 B
<i>Pseudomonas aeruginosa</i>	9213 E
<i>Staphylococcus aureus</i>	9213 B
Total coliforms – MF	9222 B
Total coliforms – MPN	9221 B
Total coliforms – Colilert Quantitray (97 well)	9223 B (excluding marine)
Total coliforms – Colilert Quantitray (51 well)	9223 B (excluding marine)
Total coliforms – Colilert-18 Quantitray (97 well)	9223 B (excluding marine)
Total coliforms – Colilert-18 Quantitray (51 well)	9223 B (excluding marine)
Total coliforms – P/A	9223 B Colilert
Total Coliforms – Quantitray	MIMM 11.A1
Total Coliforms – MPN	MIMM 11.A2

(a) Potable waters

<i>Clostridium perfringens</i> , including Spores – MF	MIMM 11.A3
<i>E. coli</i> – MF	AS/NZS 4276.7:2007
Faecal coliforms – MF	AS/NZS 4276.7:2007
Enterococci (Faecal Streptococci) – MF	MIMM 11.7
Heterotrophic Plate Count	AS/NZS 4276.3.1:2007
<i>Pseudomonas aeruginosa</i> – MF	AS/NZS 4276.13:2008
Sulphite Reducing Clostridia including spores – MF	Standing Committee of Analysts Microbiology Drinking Water 2015 (Part 6A)
Total Coliforms – MF	AS/NZS 4276.5:2007

(e) Cooling tower and industrial waters

Legionella	AS/NZS 3896:2017
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Molecular Biology

1.03 Drugs and Pharmaceuticals

(a) Microbiological quality (including sterility) (Cannabis)

Salmonella PCR In-House method

1.11 Foods

- (a) Cereals and cereal products
- (b) Edible oils, fats and derived products
- (c) Nuts, fruits, vegetables and derived products
- (d) Sauces, herbs, spices and condiments
- (e) Sugar and sugar confectionery
- (f) Dairy products
- (g) Meat, poultry and derived products
- (h) Fish and fish products
- (i) Eggs and egg products
- (k) Non-alcoholic beverages
- (p) Canned foods
- (q) Animal feeds

Listeria PCR In-House method
 Salmonella PCR In-House method

(f) Dairy products

Cronobacter PCR In-House method


(n) Other specified fresh foods (honey)

Leptospermum scoparium DNA PCR as per MPI Technical Paper 2017/31
Leptospermum scoparium DNA PCR as per MPI Technical Paper 2017/31 (modified)

1.62 Molecular Biology

(b) DNA typing

Detection of American Foulbrood by qPCR

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Detection of American Foulbrood by qPCR (in-house)

Testing for the following bacteria in kiwifruit plant material using Psa-V Taqman Real-Time PCR
Pseudomonas syringae pv. *actinidiae* (Psa)


1.71 Biological Condition

(b) Plant hygiene evaluation

Cronobacter (PCR)	In-House
Listeria (PCR)	In-House
Salmonella (PCR)	In-House

References:

AS/NZS Australian / New Zealand Standards
 ISO International Standards Organisation
 MIMM Meat Industry Microbiological Methods (5th Edition)

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