



Certificate of Analysis

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Lab Reference: 20-27501
Submitted by: NZ Honey Farms Ltd
Date Received: 29/07/2020
Testing Initiated: 29/07/2020
Date Completed: 3/08/2020
Order Number: HF2007
Reference: N/A

Report Comments

Samples were received by Analytica Laboratories in acceptable condition unless otherwise noted on this report.

Results Summary

MPI Manuka Classification*

マヌカの種別：モノフローラル マヌカ

Laboratory ID	Sample ID	MPI Manuka Classification*
20-27501-1	2007RONGOM サンプル I D	MONOFLORAL MANUKA

MPI Manuka Classification* Approver:

※モノフローラル、マルチフローラル
マヌカとして認められない蜂蜜、の3種に区別されます

Nicholas Kuan, M.Sc.
Technologist

MPI Manuka DNA

Laboratory ID	Sample ID	Manuka DNA
		Units Reporting Limit
20-27501-1	2007RONGOM	28.64

MPI Manuka DNA Approver:

※Cqの数値が36未満であること

Chelsea Blackstock, B.Sc. (Tech)
Senior Technician

MPI Manuka Markers

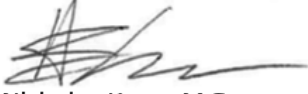
Laboratory ID	Sample ID	4-Hydroxyphenyllactic acid (4-HPLA)	2-Methoxybenzoic acid (2-MBA)	2'-Methoxy acetophenone (2'-MAP)	3-Phenyllactic acid (3-PLA)
		mg/kg 0.80	mg/kg 0.80	mg/kg 0.80	mg/kg 20
20-27501-1	2007RONGOM	6.5	11	11	400

- ①ヒドロキシフェニール乳酸は、1mg/kg以上であること
- ②メトキシ安息香酸は、1mg/kg以上であること
- ③メトキシアセトフェノン、5mg/kg以上であること
- ④DL-3フェニール乳酸は、400mg/kg以上であること

MPI Manuka Markers

Laboratory ID	Sample ID	4-Hydroxyphenyllactic acid (4-HPLA)	2-Methoxybenzoic acid (2-MBA)	2'-Methoxyacetophenone (2'-MAP)	3-Phenyllactic acid (3-PLA)
	<i>Units</i>	mg/kg	mg/kg	mg/kg	mg/kg
	<i>Reporting Limit</i>	0.80	0.80	0.80	20

MPI Manuka Markers Approver:



Nicholas Kuan, M.Sc.
Technologist

Method Summary

MPI Manuka Classification

For classification as monofloral manuka, the following chemicals all need to be present and at these levels (Animal Products Notice - General Export Requirements for Bee Products, 2018):

- 4-hydroxyphenyllactic acid at a level greater than or equal to 1mg/kg
- 2-methoxybenzoic acid at a level greater than or equal to 1mg/kg
- 2'-methoxyacetophenone at a level greater than or equal to 5mg/kg
- 3-phenyllactic acid at a level greater than or equal to 400mg/kg

And the DNA level from manuka pollen is less than Cq 36, which is approximately 3fg/ μ L.

For classification as multifloral manuka, the following chemicals all need to be present and at these levels:

- 4-hydroxyphenyllactic acid at a level greater than or equal to 1mg/kg
- 2-methoxybenzoic acid at a level greater than or equal to 1mg/kg
- 2'-methoxyacetophenone at a level greater than or equal to 1mg/kg
- 3-phenyllactic acid at a level greater than or equal to 20 mg/kg but less than 400mg/kg

And the DNA level from manuka pollen is less than Cq 36, which is approximately 3fg/ μ L.

MPI Manuka Markers

Solvent extraction, LC-MS/MS analysis.

Analytica Laboratories Ltd., is approved by the New Zealand Ministry of Primary Industries to conduct this analysis under the Recognised Laboratory Programme (RLP Method 10.05).

Leptospermum scoparium DNA (PCR)

Samples were analysed as received by the Laboratory for Manuka Pollen DNA by pollen DNA extraction followed by qPCR in accordance with the MPI Technical Paper 2016/74 (modified) (96 well method with magnetic bead extraction). Analytica Laboratories Ltd., is approved by the New Zealand Ministry of Primary Industries to conduct this analysis under the Recognised Laboratory Programme (RLP Method 10.04).

The DNA component of the MPI Manuka Honey Definition requires a Cq value of less than 36 to qualify for either a monofloral or multifloral manuka honey.