



Batch No. **2102 RONGOM**

Certificate of Analysis

【モノフローラルマヌカハニー／MGO100+】

Terrace Apiaries Ltd
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Lab Reference: 21-06383
Submitted by: N/A
Date Received: 15/02/2021
Testing Initiated: 15/02/2021
Date Completed: 17/02/2021
Order Number: N/A
Reference: N/A

Report Comments

Samples were collected by yourselves (or your agent) and analysed as received at Analytica Laboratories. Samples were in acceptable condition unless otherwise noted on this report.
Specific testing dates are available on request.

Results Summary

MPI Manuka Classification*

Laboratory ID	Sample ID	MPI Manuka Classification*
21-06383-5	WSQ21	MONOFLORAL MANUKA

MPI Manuka Classification* Approver:

Tracy Chen, B.Sc.
Senior Technician

※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

MPI Manuka DNA

Laboratory ID	Sample ID	Manuka DNA
		Units Reporting Limit
		Cq
21-06383-5	WSQ21	18.29

※Cqの数値は36未満であること

MPI Manuka DNA Approver:

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

- 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フェニル乳酸は、400mg/kg以上であること

MPI Manuka Markers

Laboratory ID	Sample ID	①	②	③	④
		4-Hydroxyphenyllactic acid (4-HPLA)	2-Methoxybenzoic acid (2-MBA)	2'-Methoxy acetophenone (2'-MAP)	3-Phenyllactic acid (3-PLA)
		Units Reporting Limit	Units Reporting Limit	Units Reporting Limit	Units Reporting Limit
		mg/kg 0.80	mg/kg 0.80	mg/kg 0.80	mg/kg 20
21-06383-5	WSQ21	9.5	14	20	540

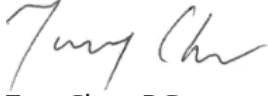
All tests reported herein have been performed in accordance with the laboratory's scope of accreditation with the exception of tests marked *, which are not accredited.

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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:



Tracy Chen, B.Sc.
Senior Technician

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.