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Certificate of Analysis

The Wright Honey Co. PO Box 79, Cust Christchurch 7444 Attention: Jeff Wright Phone: 0276985199 Email: thewrighthoneyco@icloud.com Lab Reference: 19-06779 Submitted by: Date Received: 6/03/2019 Date Completed: 7/03/2019 Order Number: Reference: TWHC2013

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*		
19-06779-1	T19a サンプルID	MONOFLORAL MANUKA		

MPI Manuka Classification* Approver:

Maria Tourna, Ph.D. C4 & DNA Team Leader

MPI Manuka DNA

マヌカのDNA検査

Laboratory ID	Sample ID	Manuka DNA		
	Units Reporting Limit		Cq	
19-06779-1	T19a		21.04	

MPI Manuka DNA Approver:

※Cqの数値が36未満であること

※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

Attorr

Maria Tourna, Ph.D. C4 & DNA Team Leader

MPI Manuka Markers			2	3	4
Laboratory ID	Sample ID	4-Hydroxyphenyllactic acid (4-HPLA)	2-Methoxybenzoic acid (2-MBA)	2'-Methoxy acetophenone (2'-MAP)	3-Phenyllactic acid (3-PLA)
	Units Reporting Limit	mg/kg 0.8	mg/kg 0.8	mg/kg 0.8	mg/kg 20
19-06779-1	T19a	8.2	15	26	490

MPI Manuka Markers Approver:

the

Nicholas Kuan, M.Sc. Technologist 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は、5mg/kg以上であること ⇒ 高いほど純度が高い
 ④DL-3フェニル乳酸は、400mg/kg以上であること

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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Method Summary

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MPI Manuka Classification	 For classification as monofloral 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 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/µL.
	 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/µL
MPI Manuka Markers	Solvent extraction, LC-MS/MS and HPLC 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).
MPI Manuka DNA	Samples were analysed as received by the Laboratory for Manuka Pollen DNA by pollen DNA extraction followed by qPCR. 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.