



Client:

**Cooperativa Campesina Apicola
Valdivia Limitada – APICOOP LTDA**

Address:

**Balmaceda N° 510, Paillaco
Region of Los Rios - Chile**

Analysis Report No.	: 002/072023-LBMP		
Product	: Honey		
Sample description / Batch	: 14-07 PT/ME-MUL		
Sample received on / transported by	: 28.07.2023 via Parcel service	Seal	: none
Sample temp. when received / stored	: RT	Sampling	: Client
Packaging / Quantity	: Plastic container / ca. 180g	Start / End of analysis	: 01.08/10-08 (2023)

ANALYSIS REQUESTED: Minimum inhibitory concentrations (MICs) of Chilean honey against infectious bacteria (*)

Bacteria	Result	Method
<i>Streptococcus pyogenes</i>	3.837	broth dilution assay
<i>Pseudomonas aeruginosa</i>	3.469	broth dilution assay
<i>Escherichia coli</i>	2.896	broth dilution assay
<i>Streptococcus pneumoniae</i>	3.242	broth dilution assay
<i>Staphylococcus aureus</i>	1.658	broth dilution assay
<i>Acinetobacter baumannii</i>	3.717	broth dilution assay
Sum of Area Under Inhibition Curve	18.819	

(*) Result expressed as the sum of the areas under the curve, made up of the quotient between the inhibition percentages and the concentration of the sample for each of the bacteria.






MAINTENANCE AND PREPARATION OF BACTERIAL CULTURES

Bacteria (strain)	Atmosphere	Culture Media (35°C for 24 h)	Culture conditions and media during MIC assay
<i>Streptococcus pyogenes</i> (ATCC19615)	Microaerophilic	Blood Agar	Soy trypticase (35°C for 24 h)
<i>Pseudomonas aeruginosa</i> (ATCC9027)	Aerobic	Soy trypticase Agar	Soy trypticase (35°C for 24 h)
<i>Escherichia coli</i> (ATCC35150)	Aerobic	Mueller Hinton Agar	Mueller Hinton (35°C for 24 h)
<i>Streptococcus pneumoniae</i>	Microaerophilic	Blood Agar	Soy trypticase (35°C for 24 h)
<i>Staphylococcus aureus</i> (ATCC6538)	Aerobic	Blood Agar	Mueller Hinton (35°C for 24 h)
<i>Acinetobacter baumannii</i> (ATCC19606)	Aerobic	Blood Agar	Mueller Hinton (35°C for 24 h)

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Interpretation:

The sum of the antibacterial activity of the honey sample against the pathogens identifies, allows us to conclude that it classifies as factor 20 + based on the PHF scale.


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