TEST REPORT

GENERAL DATA

Test Report	**n° 22/400 (DEMO)**
Date	16/09/2022

Customer	**B.A.I. Technologies SA**
Analysis Request	2022/59-SV
Description of Samples	In-Vitro Test Reports Nomonkey App Samples containing the enzyme alcohol dehydrogenase and ethanol (CH_3 CH_2 OH). Measured the effect of the induction of electromagnetic (video part) and sound (audio part) signals emitted by smartphones and modulated via the NoMonkey App (www.nomonkey.io), using H.I.T. quantum modulation technology.

1. PURPOSE OF THE ANALYSIS

Testing the kinetics of enzymatic alcohol degradation after exposure to 4 different signals emitted via the NoMonkey app and using the underlying H.I.T. (*Holographic Information Transfer*) quantum modulation technology.

2. RESULTS OBTAINED

Tables 1-4 show the alcohol abundance data (number of alcohol molecules measured per second) expressed as a function of metabolisation time with and without the application of signals induced via the NoMonkey app with its 4 buttons: Sound I (infra/ultra), Sound II (full audio), Sound & Video I (infra/ultra) and Sound & Video II (full audio) - Annex 1.

From the interattomic study[1-4] and from measurements taken by mass spectrometry (see Notes), It was possible to demonstrate the acceleration in the enzymatic metabolisation process of alcohol after only 30 minutes of using the NoMonkey app, obtaining the following values:

NoMonkey Button	Metabolisation with NoMonkey vs. metabolisation without App	Metabolic values in %
SOUND I (infra/ultra)	2.5 times	52% vs. 20%
SOUND II (full audio)	2.5 times	47% vs. 19%
SOUND & VIDEO I (infra/ultra)	3.0 times	76% vs. 26%
SOUND & VIDEO II (full audio)	3.3 times	80% vs. 24%

Table 1: Mix enzyme alcohol dehydrogenase and ethanol (CH_3 CH_2 OH) at 0.5%.
NoMonkey button: **SOUND I (infra/ultra)**

TIME (min)	ABBONDANCE (counts/s) - without App -	ABBONDANCE (counts/s) - with NoMonkey App -
00'	11.243	11.651
30'	8.976	5.643

% Reduction in Abundance (number of alcohol molecules measured per second)	20%	52%

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Table 2: Mix enzyme alcohol dehydrogenase and ethanol (CH_3 CH_2 OH) at 0.5%.
NoMonkey button: **SOUND II (full audio)**

TIME (min)	ABBONDANCE (counts/s) - without App -	ABBONDANCE (counts/s) - with NoMonkey App -
00'	10.988	10.671
30'	8.876	5.676

% Reduction in Abundance (number of alcohol molecules measured per second)	19%	47%

Table 3: Mix enzyme alcohol dehydrogenase and ethanol (CH_3 CH_2 OH) at 0.5%.
NoMonkey button: **SOUND & VIDEO I (infra/ultra)**

TIME (min)	ABBONDANCE (counts/s) - without App -	ABBONDANCE (counts/s) - with NoMonkey App -
00'	10.652	10.329
30'	7.896	2.435

% Reduction in Abundance (number of alcohol molecules measured per second)	26%	76%

Table 4: Mix enzyme alcohol dehydrogenase and ethanol (CH_3 CH_2 OH) at 0.5%.
NoMonkey button: **SOUND & VIDEO II (full audio**)

TIME (min)	ABBONDANCE (counts/s) - without App -	ABBONDANCE (counts/s) - with NoMonkey App -
00'	10.644	10.427
30'	8.132	2.134

% Reduction in Abundance (number of alcohol molecules measured per second)	24%	80%

3. REFERENCES

1. Heck AJ. Native mass spectrometry: a bridge between interactomics and structural biology. *Nat Methods*. **2008** Nov;5(11):927-33. doi: 10.1038/nmeth.1265.
2. Maccarrone G, Bonfiglio JJ, Silberstein S, Turck CW, Martins-de-Souza D. Characterization of a Protein Interactome by Co-Immunoprecipitation and Shotgun Mass Spectrometry. *Methods Mol Biol.* **2017;**1546:223-234. doi: 10.1007/978-1-4939-6730-8_19.
3. Piazza I, Kochanowski K, Cappelletti V, Fuhrer T, Noor E, Sauer U, Picotti P. A Map of Protein-Metabolite Interactions Reveals Principles of Chemical Communication. *Cell.* **2018** Jan 11;172(1-2):358-372.e23. doi: 10.1016/j.cell.2017.12.006.
4. Arzoni A, Bernardi LR, Cristoni S. In-source cloud ion mobility mass spectrometry. *Rapid Commun Mass Spectrom.* **2015** Apr 15;29(7):690-4. doi: 10.1002/rcm.7136.

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4. NOTES

Methodology: mass spectrometry

The analysis of alcohol degradation kinetics is performed using SACI-CIMS ionisation and ion mobility technology (ISB, Milan, Italy)[4] combined with an LTQ mass spectrometer (TherFisher, San Jose, USA).
The ethanol-containing solution is infused using a flow rate of 5 µL/min and a support eluent flow rate of 45 µL/min. The support eluent contains H_2O. Prior to analysis, formic acid contamination is removed by washing with H_2O (500 µL per wash performed at a flow rate of 5 µL/min). Ion focusing of the analyte (ethanol) is performed by setting the ion transfer tube voltage to 50 V and the surface voltage to 47 V. The nebulisation gas is set to a value of 70 arbitrary units and the curtain gas to 5 L/min. Acquisition is performed in SIM mode after applying a voltage of 25 V in the pre-vacuum zone.

Annex 1: NoMonkey buttons

❖ *Please note that any samples, after 30 days from the delivery of the Test Report, will be disposed of in accordance with the law*

Dr Simone Cristoni
Laboratory Director

Analyses are performed using technology recognised in the international scientific literature (Albini A. et al. Rapid Commun Mass Spectrom. 2015 Oct 15;29(19):1703-10. doi: 10.1002/rcm.7270; Rapid Commun Mass Spectrom. 2013 Feb 15;27(3):476-80. doi: 10.1002/rcm.6471).
The analyses, which are the subject of this report, are not of clinical relevance and are performed as part of research and development (R&D) activities.
The results contained in this test report refer exclusively to the sample tested and may not be reproduced even partially without the written permission of ISB.

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