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LACTOBACILLUS RHAMNOSUS LBRH 2

HUMAN ORIGIN

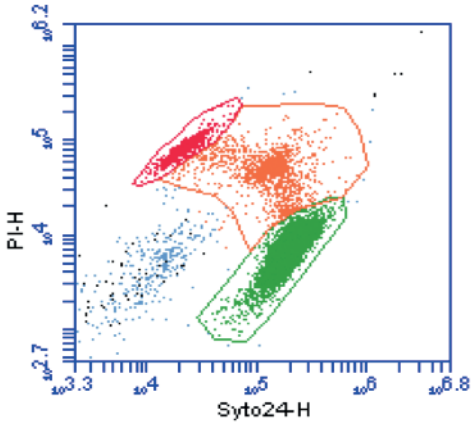
Food Safety

Live lactic probiotic bacteria in powder form, commonly used by the food industry and perfectly safe for human consumption in food supplements. This species figures on the EFSA's list of micro-organisms used in food (QPS "Qualified Presumption of Safety list" 2013).

Do not contain allergens according to European Regulation 1169/2011.

Viability

Flow cytometry is used to analyse cell viability, one by one, with the help of a fluorescent compound, tracer of the integrity of Lactobacillus rhamnosus **Lbrh2**'s membrane.



9 % of dead cells
12 % of damaged cells
79 % of live cells

Stability in powder

Lbrh2 is a **stable** strain at **20°C** when correctly formulated in a sachet or capsule.

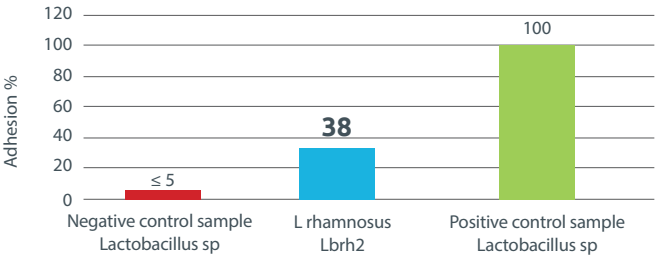
	20°C		25°C / 60% RH	
Duration (Months)	Viability (CFU/g)	Billion(s) per unit	Viability (CFU/g)	Billion(s) per unit
0	1.0E+10	70	1.0E+10	70
3	9.5E+09	67	9.7E+09	68
6	8.5E+09	60	7.6E+09	53
9	6.3E+09	44	5.6E+09	39
12	7.0E+09	49	6.7E+09	47
18	5.5E+09	39	4.3E+09	30
24	6.0E+09	42	4.7E+09	33

CFU: Colony Forming Unit ; RH : Relative Humidity

60% of the initial viability is still present after 2 years storage at 20°C.

Intestinal mucosa adhesion

Lbrh2 adheres **correctly** to Caco-2 cells' surface (human intestinal cells).



Production of antimicrobial substances

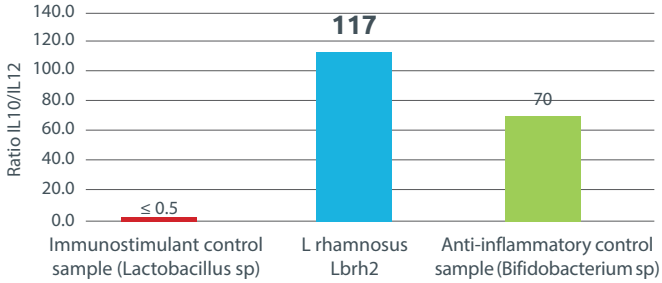
Lbrh2 inhibits the growth of pathogenic micro-organisms in agar medium.

Pathogen	Result
Escherichia Coli	I
Salmonella typhimurium	S
Listeria monocytogenes	I
Clostridium perfringens	I

R = Resistant; S = Susceptible; I = Intermediate

Immunomodulatory properties

Lbrh2 has an *in vitro* **anti-inflammatory** immune profile (PBMC model, peripheral blood mono nuclear cells).



This technical information is supplied to inform our clients and may be modified at a later date. Additional information and *in vitro* experimental protocols are available upon simple request.

FT Lbrh2-December17

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