

Food Safety



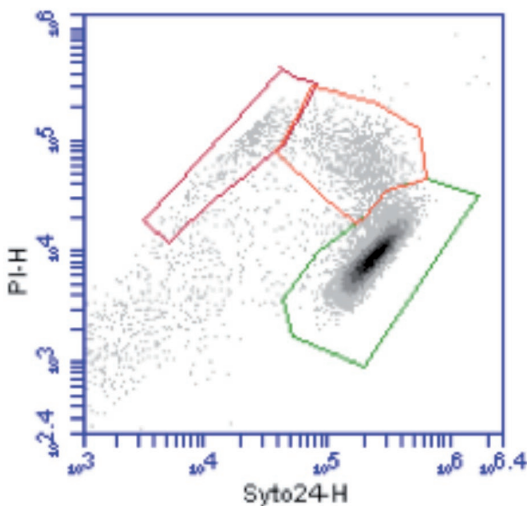
Live lactic probiotic bacteria in powder form, commonly used by the food industry and perfectly safe for human consumption in food supplements. This species figures on the EFSA's list of micro-organisms used in food (QPS "Qualified Presumption of Safety list" 2013).

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 **Lbac1**'s membrane.



1 % of dead cells
5 % of damaged cells
94 % of live cells

Stability in powder



Correctly formulated in a sachet or capsule, **Lbac1** is a **perfectly stable** strain at room temperature.

Duration (months)	18°C		25°C / 60 % RH	
	Viability (CFU/g)	Billion(s) per unit	Viability (CFU/g)	Billion(s) per unit
0	1.2E+10	12	1.2E+10	12
6	1.1E+10	11	1.0E+10	10
12	1.7E+10	17	1.1E+10	11
18	1.3E+10	13	1.3E+10	13

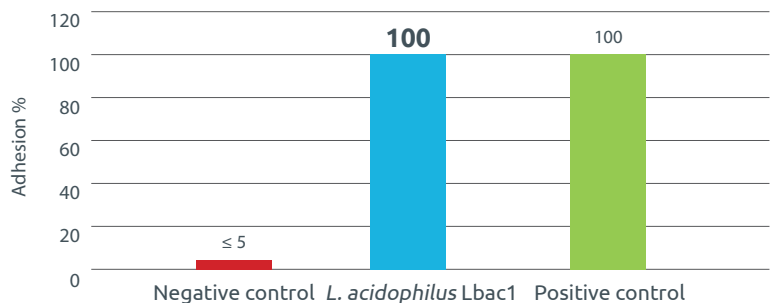
CFU: Colony Forming Unit; RH: Relative Humidity

100 % of the initial viability is still maintained after 18 months of storage at 25 °C

Intestinal mucosa adhesion



Lbac1 adheres **totally** to the surface of Caco-2 cells:



Production of antimicrobial substances



The growth of pathogen microorganisms is **strongly** inhibited by **Lbac1** in agar medium:

Pathogen	Result
<i>Clostridium difficile</i>	S
<i>Clostridium perfringens</i>	I
<i>Escherichia coli</i> O157:H7	S
<i>Listeria monocytogenes</i>	S
<i>Salmonella typhimurium</i>	S

R = Resistant; S = Susceptible; I = Intermediate

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