

PROBIOTICS

BIOGROWING | Reliable for a Better World.





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About BioGrowing

BioGrowing is a subsidiary of JuneYao Health, which is a member of JuneYao Group. JuneYao Group, founded in 1991, is a modern service enterprise focusing on industrial investment. It has four A-share listed companies in China with a total market value of 20 billion USD. It is one of the top 500 private enterprises in the service industry in China, with a credit rating of AA+.

BioGrowing, headquartered in Shanghai, was founded in 2006. The production base covers an area of 36,666 square meters and has an annual capacity of 1200 tons of highly active probiotics powder. It is one of the largest probiotics production bases in Asia. Its product range covers probiotic powder, starter cultures, functional food, and derivative products, widely used in food, medicine and healthcare, daily chemicals, aquaculture, and many other fields.

With "BioGrowing, Reliable for a Better World" as its core value, BioGrowing is constantly committed to probiotics' research, development, and innovation, moving continuously towards the vision of a "global leading probiotics manufacturer" and providing customers with a full range of product solutions and quality services.

Milestones

2023

- regions around the world
- · Achieved kosher and FSSC22000 certificates

2020

- Won the honorary title of Qingpu District Certified Enterprise **Technology Center**
- BioGrowing's products are exported to 60 countries and regions around the world

2018

• Reached a production capacity of 300 tons/year

2015

- · Won the honorary title of national "High-tech Enterprise"
- Obtained the IS09001 quality management system

2013

- Obtained cGMP certification issued by US-NSF
- Became a joint training practice base for graduate students of Beijing Agricultural College
 Was the first Shanghai based company to obtain the Food

2011

- · Won the Food and Beverage Industry-Ringier Technology
- Won the micro-embedding patent authorization Became a member of China Dairy Industry Association

2009

2006

- · BioGrowing was established in Qingpu Industrial Zone,
- · BioGrowing Probiotics R&D Center was established.

2024

2021

- · Won the Qingpu Outstanding Talent Team Award

2019

- Built a new production line for Bacillus coagulans Won the honorary title of National "High-Tech Enterprise" again Won the honorary title of "High-tech Research and Development

2016

- Won the title of "Science Popularization Base" awarded by Shanghai Science and Technology Committee

 Became the member of Shanghai Biomedical Industry

2014

The only Chinese company to take part in drafting the industrial standards of "Lactic Acid Bacteria for Food Processing" by the Ministry of Industry and Information Technology

2012

- · Began to operate in overseas markets
- · Became a member of the chinese Association of Food Science and
- Awarded the title of "Industrialization Base of National Dairy Engineering Technology Research Center"

2010

2008

Our R&D Center has become a Post-Doctoral Research

1998

Industry Position

In July 2014, the Ministry of Industry and Information Technology issued "Lactic acid bacteria for food process" BioGrowing was one of the drafting units.

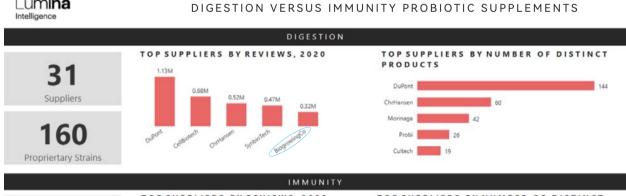


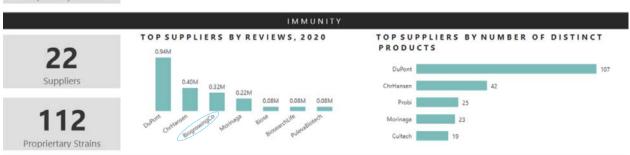
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BioGrowing Market Status

(TOP supplier by reviews in 2020. TOP3 in immunity probiotic supplement, TOP5 in digestion probiotic supplement.)

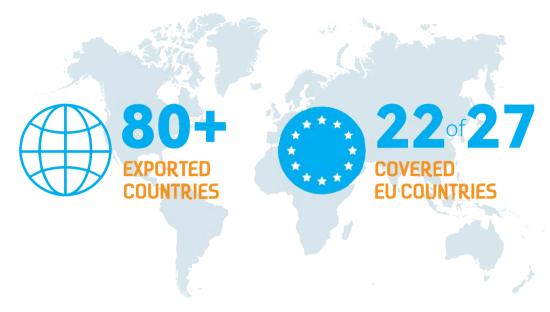




www.lumina-intelligence.com/market/probiotics

Global Reach

With a market presence in over 80 countries and regions, covering 22 countries out of the 27 EU Member States, BioGrowing is a globally reputed player in probiotics.



Honor and Qualification

Academic Frontier

More than 100 scientific research papers published at domestically and internationally.







Authorized Patents

More than 70 invention patents and utility model patents have been authorized.





International authoritative quality standard certification

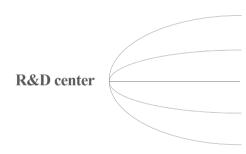
- 1. ISO22000 food safety management system certification
- 2. ISO9001 quality management system certification
- 3. HACCP food safety assurance system certification
- 4. Canada NNHPD-FSRN Overseas manufacturer certification
- 5. NSF-cGMP dietary Supplement Certification in the United States
- 6. FDA registration and certification
- 7. British BRC GS certification
- 8. Halal certification
- 9. Kosher certification
- 10. FSSC22000 certification

Research and Development

Behind every strain, there is a professional R&D team.

BioGrowing is an R&D-driven high-tech enterprise. BioGrowing's R&D Center focuses on the research and development of probiotic strains, fermentation production, active functions, and product applications.





- · Bacteria Library
- Basic Research Institute (Including Industry-University-Research platform)
- Medical Research Institute (ODM/CDMO Technical support)
- Dairy Research Institute
 (Fermentation application solutions and technical support)
- · Applied Research Institute

Core Industrialization Technology

The entire production process from fermentation to freeze-drying, along with the technological innovations in high-stability, high-density fermentation-related processes.

High-Density Fermentation Technology

The maximum number of viable bacteria per gram of probiotic bacteria powder can reach more than one trillion CFU.

Non-dairy lyophilization protection technology

Achieve the manufacture of allergen-free probiotic bacteria powder and improve product safety.

Functional fermentation technology

Lactiplantibacillus plantarum powder with high glutamine synthase activity can be produced.

Cryogenic freezing technique

Cryogenic freezing technique is characterized by high quality, high efficiency, and low cost.



Industry Association Cooperation

The International Probiotic Association China Nutrition Society

China Dairy Industry Association

China Food Additives Association

Lactic Acid Bacteria Branch of Chinese Society of Food Science and Technology National Dairy Engineering Technology Center

China Nutrition and Health Food Association

Flora-Focus® Probiotic Bacteria Strains

LA-G80 Lactobacillus acidophilus Lactobacillus acidophilus Lactobacillus acidophilus Lactobacillus acidophilus Lactobacillus acidophilus Lactobacillus acidophilus Lactobacillus plantarum 5.0*10¹¹	BioGrowing	Strains Generic Latin S	Scientific Name	Potency
Lp-G18 Lactiplantibacillus plantarum Lactobacillus plantarum Lactobacillus plantarum 3,0*10** Lactiplantibacillus plantarum Lactobacillus plantarum 3,0*10** Lactiplantibacillus plantarum Lactobacillus plantarum 3,0*10** YS1 Lactiplantibacillus plantarum Lactobacillus plantarum 3,0*10** YS1 Lactiplantibacillus plantarum Lactobacillus plantarum 3,0*10** Lactobacillus plantarum 1,0*10** Lactobacillus plantarum Lactobacillus plantarum 1,0*10** Lactobacillus plan	Code	Current name of bacteria species	Previous name of bacteria species	(CFU/g)
ZIUF T17	LA-G80	Lactobacillus acidophilus	Lactobacillus acidophilus	2.0*1011
ZIUF T34	Lp-G18	Lactiplantibacillus plantarum (Active and Postbiotic)	Lactobacillus plantarum	5.0*1011
ZJUF N1 Lactiplantibacillus plantarum (Active and Postbiotic) Lactobacillus plantarum 3.0*10*11 YS1 Lactiplantibacillus plantarum Lactobacillus plantarum 3.0*10*11 126 Lactiplantibacillus plantarum Lactobacillus plantarum 4.0*10*11 L1*-G14 Lacticascibacillus rhamnosus Lactobacillus rhamnosus 5.0*10*11 L1*-G14 Lacticascibacillus rhamnosus Lactobacillus rhamnosus 5.0*10*11 L1*-G16*10 Lacticascibacillus paracasei (Active and Postbiotic) Lactobacillus rhamnosus 5.0*10*11 L1*-G10*10 Lacticascibacillus paracasei (Active and Postbiotic) Lactobacillus paracasei 4.0*10*11 L2*-G10*0 Limosilactobacillus reuteri Lactobacillus paracasei 4.0*10*11 L3*-G6*0 Ligilactobacillus salivarius Lactobacillus salivarius Lactobacillus sacilius Lactobacillus paracasei 2.0*10*11 L3*-G10*10 L3*-G1	ZJUF T17	Lactiplantibacillus plantarum	Lactobacillus plantarum	3.0*1011
YS1	ZJUF T34	Lactiplantibacillus plantarum	Lactobacillus plantarum	3.0*1011
Le-G14 Lacticaseibacillus rhamnosus Lactobacillus rhamnosus 5.0*10¹¹	ZJUF N1	Lactiplantibacillus plantarum (Active and Postbiotic)	Lactobacillus plantarum	3.0*1011
Lr-G14 Lacticaseibacillus rhamnosus (Lactobacillus rhamnosus 5.0*10" JL1 Lacticaseibacillus rhamnosus (Lactobacillus rhamnosus 5.0*10" LPG-G110 Lacticaseibacillus paracasei (Lactobacillus paracasei Lactobacillus paracasei 4.0*10" LR-G100 Limosilaciobacillus salivarius Lactobacillus paracasei 2.0*10" LS-G60 Ligilactobacillus salivarius Lactobacillus gasseri 2.0*10" LG-G12 Lactobacillus johnsonii Lactobacillus gasseri 2.0*10" LI-G55 Lactobacillus johnsonii Lactobacillus gasseri 2.0*10" BB-G90 Bifidobacterium bifidum Bifidobacterium bifidum 2.0*10" BL-G301 Bifidobacterium longum subsp. lactis Bifidobacterium nongum subsp. lactis (B.lactis) 5.0*10" LC-G11 Lacticaseibacillus casei Lactobacillus delbrueckii subsp. bulgaricus 1.0*10" LB-G40 Lactobacillus delbrueckii subsp.bulgaricus Lactobacillus delbrueckii subsp. lactis 5.0*10" LH-G51 Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10" LH-G51 Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10" LH-G51 Lactobacillus selveticus Lactobacillus helveticus 1.0*10" LF-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10" LC-G32 Lactobacillus serispatus Lactobacillus fermentum 2.0*10" LK-G03 Latilactobacillus sekiranofaciens subsp.kefiranofaciens Lailactobacillus kefiranofaciens subsp.kefiranofaciens 1.0*10" LC-G33 Latilactobacillus sekiranofaciens Subsp.kefiranofaciens Latilactobacillus sekiranofaciens 1.0*10" BH-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp.infantis (B.infantis) 1.0*10" BC-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10" BC-G42 Lactococcus lactis subsp. lactis 1.0*10" BC-G44 Lactococcus lactis subsp. lactis 1.0*10" BC-G53 Latilactobacillus sexima 1.0*10" BC-G66 Bifidobacterium adolescentis Bifidobacterium adolescentis 1.0*10" BC-G64 Lactococcus lactis subsp. lactis 1.0*10" BC-G42 Lactococcus lactis subsp. lactis 1.0*10" BC-G42 Lactococcus lactis subsp. lactis 1.0*10" BC-G673 Pediococcus pe	YS1	Lactiplantibacillus plantarum	Lactobacillus plantarum	3.0*1011
Lacticaseibacillus rhamnosus Lactobacillus rhamnosus 5.0°10'1	J26	Lactiplantibacillus plantarum (Active and Postbiotic)	Lactobacillus plantarum	4.0*1011
LPC-G110 Lacticaseibacillus paracasei (Active and Postbotoc) LRR-G100 Limosilactobacillus reuteri Lactobacillus reuteri 2.0*10¹¹¹ LS-G60 Ligilactobacillus salivarius 1.0*10¹¹¹ LG-G12 Lactobacillus saseri Lactobacillus salivarius 1.0*10¹¹¹ LJ-G55 Lactobacillus johnsonii Lactobacillus johnsonii 1.0*10¹¹ BB-G90 Bifidobacterium bifidum Bifidobacterium bifidum 2.0*10¹¹¹ BL-G301 Bifidobacterium mimalis subsp. lactis Bifidobacterium longum subsp. longum (B.longum) 1.0*10¹¹ LC-G11 Lacticaseibacillus casei Lactobacillus casei Lactobacillus casei 4.0*10¹¹ LB-G40 Lactobacillus delbrueckii subsp.bulgaricus Lactobacillus delbrueckii subsp. bulgaricus 5.0*10¹⁰ LL-G41 Lactobacillus delbrueckii subsp.bulgaricus Lactobacillus delbrueckii subsp. bulgaricus 5.0*10¹⁰ LL-G41 Lactobacillus helveticus Lactobacillus helveticus Lactobacillus fermentum 2.0*10¹¹¹ LK-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10¹¹¹ LK-G03 Latilactobacillus kefirmofaciens subsp. kefiranofaciens Latilactobacillus kefiranofaciens 1.0*10¹¹ LS-G22 Lactobacillus curvatus Latilactobacillus kefiranofaciens 1.0*10¹¹ LS-G33 Latilactobacillus cakei Latilactobacillus kefiranofaciens subsp. kefiranofaciens 1.0*10¹¹ LS-G33 Latilactobacillus curvatus Latilactobacillus kefiranofaciens 1.0*10¹¹ LS-G30 Latilactobacillus curvatus Latilactobacillus kefiranofaciens 1.0*10¹¹ BB-G95 Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10¹¹ BB-G966 Bifidobacterium streve Bifidobacterium molesseentis 1.0*10¹¹ BB-G95 Lactococcus salivarius subsp. thermophilus Streptococcus salivarius subsp. thermophilus Streptococcus salivarius subsp. thermophilus Streptococcus seremoris Lactococcus lactis subsp. Lactis LL-G42 Lactococcus acciditactici Pediococcus sacidilactici 2.0*10¹¹ PA-G73 Pediococcus pentosaceus Pediococcus pentosaceus 1.0*10¹¹¹ LL-G27 Leuconostoc mesenteroides subsp. mesenteroides Leuconostoc mesenteroides subsp. mesenteroides 1.0*10¹¹¹	Lr-G14	Lacticaseibacillus rhamnosus	Lactobacillus rhamnosus	5.0*1011
LR-G100 Limosilactobacillus reuteri Lactobacillus reuteri 2.0*10 ¹¹ LS-G60 Ligilactobacillus salivarius Lactobacillus salivarius 1.0*10 ¹¹ LG-G12 Lactobacillus gasseri Lactobacillus gasseri 2.0*10 ¹¹ LJ-G55 Lactobacillus johnsonii Lactobacillus gasseri 2.0*10 ¹¹ BB-G90 Bifidobacterium bifidum Bifidobacterium bifidum 2.0*10 ¹¹ BL-G101 Bifidobacterium animalis subsp. lactis Bifidobacterium bifidum 8ifidobacterium longum subsp. lactis (B.lactis) 5.0*10 ¹¹ BL-G301 Bifidobacterium longum subsp.longum Bifidobacterium longum subsp. longum (B.longum) 1.0*10 ¹¹ LC-G11 Lacticaseibacillus casei Lactobacillus casei 4.0*10 ¹¹ LB-G40 Lactobacillus casei Lactobacillus delbrueckii subsp.bulgaricus Lactobacillus delbrueckii subsp. bulgaricus 5.0*10 ¹⁰ LL-G41 Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10 ¹⁰ LH-G51 Lactobacillus helveticus Lactobacillus helveticus 1.0*10 ¹¹ LF-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10 ¹¹ LG-G22 Lactobacillus crispatus Lactobacillus rerispatus 1.0*10 ¹¹ LS-G23 Latilactobacillus sakei Latilactobacillus sehiranofaciens subsp.kefiranofaciens 1.0*10 ¹¹ LS-G33 Latilactobacillus sakei Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10 ¹¹ LC-G33 Latilactobacillus sakei Latilactobacillus curvatus 1.0*10 ¹¹ LG-G41 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10 ¹¹ LG-G33 Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10 ¹¹ LG-G35 Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10 ¹¹ LG-G42 Latococcus salivarius subsp. infantis Bifidobacterium dolescentis 1.0*10 ¹¹ BR-G95 Bifidobacterium dolescentis Bifidobacterium adolescentis 1.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. hermophilus 1.0*10 ¹¹ LLL-G45 Lactococcus lactis subsp. lactis 1.0*10 ¹¹ LA-G47 Leuconostoc mesenteroides subsp.mesenteroides subsp.mesenteroides subsp. mesenteroides 1.0*10 ¹¹ LA-G47 Leuconostoc mesenteroides subsp.mesenteroides 1.0*10 ¹¹	JL1	Lacticaseibacillus rhamnosus (Active and Postbiotic)	Lactobacillus rhamnosus	5.0*1011
LS-G60 Ligilactobacillus salivarius Lactobacillus salivarius 1.0*10¹¹¹ LG-G12 Lactobacillus gasseri Lactobacillus gasseri 2.0*10¹¹ LJ-G55 Lactobacillus johnsonii Lactobacillus johnsonii 1.0*10¹¹ BB-G90 Bifidobacterium bifidum Bifidobacterium bifidum 2.0*10¹¹ BL-G10¹ Bifidobacterium animalis subsp. lactis Bifidobacterium animalis subsp. lactis 5.0*10¹¹ BL-G30¹ Bifidobacterium longum subsp. longum Bifidobacterium longum subsp. longum (B.longum) 1.0*10¹¹ LC-G1¹ Lacticaseibacillus casei Lactobacillus casei Lactobacillus casei Lactobacillus delbrueckii subsp. bulgaricus 5.0*10¹⁰ LL-G4¹ Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10¹⁰ LL-G4¹ Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 1.0*10¹⁰ LC-G3¹ Lactobacillus fermentum Lactobacillus fermentum 2.0*10¹⁰ LC-G22 Lactobacillus fermentum Lactobacillus fermentum 2.0*10¹⁰ LC-G22 Lactobacillus sekirunofaciens subsp.kefiranofaciens Latilactobacillus sekiranofaciens 1.0*10¹⁰ LC-G33 Latilactobacillus sakei Latilactobacillus sekirunofaciens subsp. latilactobacillus sakei Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10¹⁰ BI-G20¹ Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10¹⁰ BI-G20¹ Bifidobacterium breve Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10¹⁰ BI-G46 Bifidobacterium dolescentis Bifidobacterium meveve 3.0*10¹⁰ BI-G46 Bifidobacterium dolescentis Sifidobacterium breve Bifidobacterium breve Bifidoba	LPc-G110	Lacticaseibacillus paracasei (Active and Postbiotic)	Lactobacillus paracasei	4.0*1011
LG-G12 Lactobacillus gasseri Lactobacillus gasseri 1.0*10 ¹¹ LJ-G55 Lactobacillus johnsonii Lactobacillus johnsonii 1.0*10 ¹¹ BB-G90 Bifidobacterium bifidum Bifidobacterium bifidum 2.0*10 ¹¹ BL-G101 Bifidobacterium animalis subsp. lactis Bifidobacterium animalis subsp. lactis (B.lactis) 5.0*10 ¹¹ BL-G301 Bifidobacterium longum subsp.longum Bifidobacterium longum subsp. longum (B.longum) 1.0*10 ¹¹ LC-G11 Lacticaseibacillus casei Lactobacillus casei 4.0*10 ¹¹ LB-G40 Lactobacillus delbrueckii subsp.bulgaricus Lactobacillus delbrueckii subsp. bulgaricus 5.0*10 ¹⁰ LL-G41 Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10 ¹⁰ LH-G51 Lactobacillus helveticus Lactobacillus helveticus 1.0*10 ¹¹ LF-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10 ¹¹ LG-G22 Lactobacillus crispatus Lactobacillus crispatus 1.0*10 ¹¹ LS-G23 Latilactobacillus kefiranofaciens subsp.kefiranofaciens 1.0*10 ¹¹ LS-G23 Latilactobacillus sakei Latilactobacillus sakei 1.0*10 ¹¹ BI-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10 ¹¹ BR-G95 Bifidobacterium longum subsp.infantis Bifidobacterium breve 3.0*10 ¹¹ BR-G96 Bifidobacterium adolescentis Bifidobacterium breve 3.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	LR-G100	Limosilactobacillus reuteri	Lactobacillus reuteri	2.0*1011
LJ-G55 Lactobacillus johnsonii Lactobacillus johnsonii 1.0*10 ¹¹ BB-G90 Bifidobacterium bifidum Bifidobacterium bifidum 2.0*10 ¹¹ BL-G101 Bifidobacterium animalis subsp. lactis Bifidobacterium animalis subsp. lactis (B.lactis) 5.0*10 ¹¹ BL-G301 Bifidobacterium longum subsp.longum Bifidobacterium longum subsp. longum (B.longum) 1.0*10 ¹¹ LC-G11 Lacticaseibacillus casei Lactobacillus casei 4.0*10 ¹¹ LB-G40 Lactobacillus delbrueckii subsp.bulgaricus Lactobacillus delbrueckii subsp. bulgaricus 5.0*10 ¹⁰ LL-G41 Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10 ¹⁰ LH-G51 Lactobacillus helveticus Lactobacillus delbrueckii subsp. lactis 5.0*10 ¹⁰ LF-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10 ¹¹ Lc-G22 Lactobacillus crispatus Lactobacillus fermentum 2.0*10 ¹¹ LK-G03 Latilactobacillus sakei Latilactobacillus selfiranofaciens 1.0*10 ¹¹ LC-G33 Latilactobacillus sakei Latilactobacillus sakei 1.0*10 ¹¹ LC-G33 Latilactobacillus curvatus Latilactobacillus subsp. infantis (B.infantis) 1.0*10 ¹¹ BB-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10 ¹¹ BB-G95 Bifidobacterium breve Bifidobacterium delescentis 1.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp. lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PA-G73 Pediococcus pentosaceus Pediococcus pentosaceus 1.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides subsp. mesenteroides 1.0*10 ¹¹	LS-G60	Ligilactobacillus salivarius	Lactobacillus salivarius	1.0*1011
BB-G90 Bifidobacterium bifidum Bifidobacterium bifidum 2.0*10 ¹¹ BL-G101 Bifidobacterium animalis subsp. lactis Bifidobacterium animalis subsp. lactis (B.lactis) 5.0*10 ¹¹ BL-G301 Bifidobacterium longum subsp.longum Bifidobacterium longum subsp. longum (B.longum) 1.0*10 ¹¹ LC-G11 Lacticaseibacillus casei Lactobacillus casei 4.0*10 ¹¹ LB-G40 Lactobacillus delbrueckii subsp.bulgaricus Lactobacillus delbrueckii subsp. bulgaricus 5.0*10 ¹⁰ LL-G41 Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10 ¹⁰ LH-G51 Lactobacillus helveticus Lactobacillus helveticus 1.0*10 ¹¹ LF-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10 ¹¹ LC-G22 Lactobacillus crispatus Lactobacillus crispatus 1.0*10 ¹¹ LK-G03 Latilactobacillus kefiranofaciens subsp.kefiranofaciens Latilactobacillus sakei Latilactobacillus sakei 1.0*10 ¹¹ LC-G33 Latilactobacillus sakei Latilactobacillus sakei 1.0*10 ¹¹ BI-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10 ¹¹ BB-G95 Bifidobacterium breve Bifidobacterium breve 3.0*10 ¹¹ BQ-G66 Bifidobacterium adolescentis Bifidobacterium adolescentis 1.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. hermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PA-G75 Pediococcus pentosaceus Leuconostoc mesenteroides subsp. mesenteroides 1.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides subsp. mesenteroides 1.0*10 ¹¹	LG-G12	Lactobacillus gasseri	Lactobacillus gasseri	2.0*1011
BL-G101 Bifidobacterium animalis subsp. lactis Bifidobacterium animalis subsp. lactis (B.lactis) 5.0*10 ¹¹ BL-G301 Bifidobacterium longum subsp.longum Bifidobacterium longum subsp. longum (B.longum) 1.0*10 ¹¹ LC-G11 Lacticaseibacillus casei Lactobacillus casei 4.0*10 ¹¹ LB-G40 Lactobacillus delbrueckii subsp. bulgaricus Lactobacillus delbrueckii subsp. bulgaricus 5.0*10 ¹⁰ LL-G41 Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10 ¹⁰ LH-G51 Lactobacillus helveticus Lactobacillus helveticus 1.0*10 ¹¹ Le-G22 Lactobacillus fermentum Lactobacillus fermentum 2.0*10 ¹¹ LS-G33 Latilactobacillus kefiranofaciens subsp.kefiranofaciens Latilactobacillus sakei Latilactobacillus sakei Latilactobacillus sakei 1.0*10 ¹¹ LC-G33 Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10 ¹¹ BB-G95 Bifidobacterium longum subsp.infantis Bifidobacterium breve Bifidobacterium breve 3.0*10 ¹¹ BP-G66 Bifidobacterium adolescentis Bifidobacterium dolescentis 1.0*10 ¹¹ LLL-G25 Lactococcus salivarius subsp. hermophilus Streptococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus pentosaceus Pediococcus pentosaceus 1.0*10 ¹¹ LLM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides subsp. mesenteroides 1.0*10 ¹¹ Leuconostoc mesenteroid	LJ-G55	Lactobacillus johnsonii	Lactobacillus johnsonii	1.0*1011
BL-G301 Bifidobacterium longum subsp.longum Bifidobacterium longum subsp. longum (B.longum) 1.0*10 ¹¹ LC-G11 Lacticaseibacillus casei Lactobacillus casei 4.0*10 ¹¹ LB-G40 Lactobacillus delbrueckii subsp.bulgaricus Lactobacillus delbrueckii subsp. bulgaricus 5.0*10 ¹⁰ LL-G41 Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10 ¹⁰ LH-G51 Lactobacillus helveticus Lactobacillus helveticus 1.0*10 ¹¹ LF-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10 ¹¹ LC-G22 Lactobacillus crispatus Lactibacillus crispatus 1.0*10 ¹¹ LK-G03 Latilactobacillus kefiranofaciens subsp.kefiranofaciens Latilactobacillus kefiranofaciens 1.0*10 ¹¹ LS-G23 Latilactobacillus sakei Latilactobacillus sakei 1.0*10 ¹¹ LC-G33 Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10 ¹¹ BI-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10 ¹¹ BB-G95 Bifidobacterium breve Bifidobacterium breve 3.0*10 ¹¹ BQ-G66 Bifidobacterium adolescentis Bifidobacterium adolescentis 1.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	BB-G90	Bifidobacterium bifidum	Bifidobacterium bifidum	2.0*1011
LC-G11 Lacticaseibacillus casei Lactobacillus casei 5.0*10 ¹⁰ LB-G40 Lactobacillus delbrueckii subsp.bulgaricus Lactobacillus delbrueckii subsp. bulgaricus 5.0*10 ¹⁰ LL-G41 Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10 ¹⁰ LH-G51 Lactobacillus helveticus Lactobacillus helveticus 1.0*10 ¹¹ LF-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10 ¹¹ Lc-G22 Lactobacillus crispatus Lactobacillus kefiranofaciens subsp.kefiranofaciens 1.0*10 ¹¹ LK-G03 Latilactobacillus sakei Latilactobacillus sakei 1.0*10 ¹¹ LC-G33 Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10 ¹¹ BI-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10 ¹¹ BB-G95 Bifidobacterium delescentis Bifidobacterium breve 3.0*10 ¹¹ BQ-G66 Bifidobacterium adolescentis Streptococcus thermophilus 1.0*10 ¹¹ LLL-G25 Lactococcus salivarius subsp. thermophilus Streptococcus thermophilus 1.0*10 ¹¹ LLL-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹ Leuconostoc mesenteroides subsp.mesenteroides 1.0*10 ¹¹ Leuconostoc mesenteroides 1.0*10 ¹¹ Le	BL-G101	Bifidobacterium animalis subsp. lactis	Bifidobacterium animalis subsp. lactis (B.lactis)	5.0*1011
LB-G40 Lactobacillus delbrueckii subsp.bulgaricus Lactobacillus delbrueckii subsp. bulgaricus 5.0*10¹0 LL-G41 Lactobacillus delbrueckii subsp.lactis Lactobacillus delbrueckii subsp. lactis 5.0*10¹0 LH-G51 Lactobacillus helveticus Lactobacillus helveticus 1.0*10¹1 LF-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10¹¹1 Lc-G22 Lactobacillus crispatus Lactobacillus crispatus 1.0*10¹¹1 LK-G03 Latilactobacillus kefiranofaciens subsp.kefiranofaciens Latilactobacillus kefiranofaciens 1.0*10¹¹1 LS-G23 Latilactobacillus sakei Latilactobacillus sakei 1.0*10¹¹1 LC-G33 Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10¹¹1 BI-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10¹¹1 BB-G95 Bifidobacterium breve Bifidobacterium breve 3.0*10¹¹1 BQ-G66 Bifidobacterium adolescentis Bifidobacterium adolescentis 1.0*10¹¹1 ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10¹¹1 LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. cremoris 2.0*10¹¹1 LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10¹¹1 PA-G73 Pediococcus pentosaceus Pediococcus acidilactici 2.0*10¹¹1 LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides subsp. mesenteroides 1.0*10¹¹1	BL-G301	Bifidobacterium longum subsp.longum	Bifidobacterium longum subsp. longum (B.longum)	1.0*1011
LL-G41 Lactobacillus delbrueckii subsp.lactis LH-G51 Lactobacillus helveticus LH-G51 Lactobacillus fermentum Lactobacillus helveticus Lactobacillus fermentum Lactobacillus fermentum Lactobacillus crispatus Lactobacillus crispatus Lactobacillus crispatus Latilactobacillus kefiranofaciens subsp.kefiranofaciens LK-G03 Latilactobacillus kefiranofaciens subsp.kefiranofaciens LS-G23 Latilactobacillus sakei LC-G33 Latilactobacillus curvatus LC-G33 Latilactobacillus curvatus Latilactobacillus curvatus Latilactobacillus curvatus Latilactobacillus curvatus BI-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) BB-G95 Bifidobacterium breve Bifidobacterium breve Bifidobacterium adolescentis ST-G30 Streptococcus salivarius subsp. thermophilus LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis Lactococcus lactis subsp. lactis Lactococcus lactis subsp. cremoris PA-G73 Pediococcus acidilactici Pediococcus pentosaceus Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides Leuconostoc mesenteroides Leuconostoc mesenteroides Leuconostoc mesenteroides	LC-G11	Lacticaseibacillus casei	Lactobacillus casei	4.0*1011
LH-G51 Lactobacillus helveticus Lactobacillus fermentum 2.0*10 ¹¹ LF-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10 ¹¹ Le-G22 Lactobacillus crispatus Lactobacillus crispatus 1.0*10 ¹¹ LK-G03 Latilactobacillus kefiranofaciens subsp.kefiranofaciens Latilactobacillus kefiranofaciens 1.0*10 ¹¹ LS-G23 Latilactobacillus sakei Latilactobacillus sakei 1.0*10 ¹¹ LC-G33 Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10 ¹¹ B1-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10 ¹¹ BB-G95 Bifidobacterium breve Bifidobacterium breve 3.0*10 ¹¹ BQ-G66 Bifidobacterium adolescentis Bifidobacterium adolescentis 1.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus pentosaceus Pediococcus pentosaceus 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides subsp. mesenteroides 1.0*10 ¹¹	LB-G40	Lactobacillus delbrueckii subsp.bulgaricus	Lactobacillus delbrueckii subsp. bulgaricus	5.0*10 ¹⁰
LF-G89 Limosilactobacillus fermentum Lactobacillus fermentum 2.0*10 ¹¹ Lc-G22 Lactobacillus crispatus 1.0*10 ¹¹ LK-G03 Latilactobacillus kefiranofaciens subsp.kefiranofaciens Latilactobacillus kefiranofaciens subsp.kefiranofaciens 1.0*10 ¹¹ LS-G23 Latilactobacillus sakei Latilactobacillus sakei 1.0*10 ¹¹ LC-G33 Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10 ¹¹ BI-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10 ¹¹ BB-G95 Bifidobacterium breve Bifidobacterium breve 3.0*10 ¹¹ BQ-G66 Bifidobacterium adolescentis Bifidobacterium adolescentis 1.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PP-G15 Pediococcus pentosaceus Leuconostoc mesenteroides subsp. mesenteroides 1.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	LL-G41	Lactobacillus delbrueckii subsp.lactis	Lactobacillus delbrueckii subsp. lactis	5.0*1010
Lc-G22Lactobacillus crispatusLactobacillus crispatus1.0*1011LK-G03Latilactobacillus kefiranofaciens subsp.kefiranofaciensLatilactobacillus kefiranofaciens subsp.kefiranofaciens1.0*1011LS-G23Latilactobacillus sakeiLatilactobacillus sakei1.0*1011LC-G33Latilactobacillus curvatusLatilactobacillus curvatus1.0*1011BI-G201Bifidobacterium longum subsp.infantisBifidobacterium longum subsp. infantis (B.infantis)1.0*1011BB-G95Bifidobacterium breveBifidobacterium breve3.0*1011BQ-G66Bifidobacterium adolescentisBifidobacterium adolescentis1.0*1011ST-G30Streptococcus salivarius subsp. thermophilusStreptococcus thermophilus4.0*1011LLL-G25Lactococcus lactis subsp.lactisLactococcus lactis subsp. lactis2.0*1011LLC-G42Lactococcus cremorisLactococcus lactis subsp. cremoris2.0*1011PA-G73Pediococcus acidilacticiPediococcus acidilactici2.0*1011PP-G15Pediococcus pentosaceusPediococcus pentosaceus2.0*1011LM-G27Leuconostoc mesenteroides subsp.mesenteroidesLeuconostoc mesenteroides1.0*1011	LH-G51	Lactobacillus helveticus	Lactobacillus helveticus	1.0*1011
LK-G03Latilactobacillus kefiranofaciens subsp.kefiranofaciensLatilactobacillus kefiranofaciens subsp.kefiranofaciensLS-G23Latilactobacillus sakeiLatilactobacillus sakei1.0*10*11LC-G33Latilactobacillus curvatusLatilactobacillus curvatus1.0*10*11BI-G201Bifidobacterium longum subsp.infantisBifidobacterium longum subsp. infantis (B.infantis)1.0*10*11BB-G95Bifidobacterium breve3.0*10*11BQ-G66Bifidobacterium adolescentisBifidobacterium adolescentis1.0*10*11ST-G30Streptococcus salivarius subsp. thermophilusStreptococcus thermophilus4.0*10*11LLL-G25Lactococcus lactis subsp.lactisLactococcus lactis subsp. lactis2.0*10*11LLC-G42Lactococcus cremorisLactococcus lactis subsp. cremoris2.0*10*11PA-G73Pediococcus acidilacticiPediococcus acidilactici2.0*10*11PP-G15Pediococcus pentosaceusPediococcus pentosaceus2.0*10*11LM-G27Leuconostoc mesenteroides subsp.mesenteroidesLeuconostoc mesenteroides1.0*10*11	LF-G89	Limosilactobacillus fermentum	Lactobacillus fermentum	2.0*1011
LS-G23 Latilactobacillus sakei Latilactobacillus sakei 1.0*10 ¹¹ LC-G33 Latilactobacillus curvatus Latilactobacillus curvatus 1.0*10 ¹¹ BI-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10 ¹¹ BB-G95 Bifidobacterium breve Bifidobacterium breve 3.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PP-G15 Pediococcus pentosaceus Pediococcus pentosaceus 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	Lc-G22	Lactobacillus crispatus	Lactobacillus crispatus	1.0*1011
LC-G33Latilactobacillus curvatusLatilactobacillus curvatus1.0*1011BI-G201Bifidobacterium longum subsp. infantisBifidobacterium longum subsp. infantis (B.infantis)1.0*1011BB-G95Bifidobacterium breveBifidobacterium breve3.0*1011BQ-G66Bifidobacterium adolescentis1.0*1011ST-G30Streptococcus salivarius subsp. thermophilusStreptococcus thermophilus4.0*1011LLL-G25Lactococcus lactis subsp. lactisLactococcus lactis subsp. lactis2.0*1011LLC-G42Lactococcus cremorisLactococcus lactis subsp. cremoris2.0*1011PA-G73Pediococcus acidilacticiPediococcus acidilactici2.0*1011PP-G15Pediococcus pentosaceusPediococcus pentosaceus2.0*1011LM-G27Leuconostoc mesenteroides subsp. mesenteroidesLeuconostoc mesenteroides1.0*1011	LK-G03	Latilactobacillus kefiranofaciens subsp.kefiranofaciens	Latilactobacillus kefiranofaciens subsp.kefiranofaciens	1.0*1011
BI-G201 Bifidobacterium longum subsp.infantis Bifidobacterium longum subsp. infantis (B.infantis) 1.0*10 ¹¹ BB-G95 Bifidobacterium breve Bifidobacterium breve 3.0*10 ¹¹ BQ-G66 Bifidobacterium adolescentis Bifidobacterium adolescentis 1.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PP-G15 Pediococcus pentosaceus Pediococcus pentosaceus 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	LS-G23	Latilactobacillus sakei	Latilactobacillus sakei	1.0*1011
BB-G95 Bifidobacterium breve Bifidobacterium breve 3.0*10 ¹¹ BQ-G66 Bifidobacterium adolescentis Bifidobacterium adolescentis 1.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PP-G15 Pediococcus pentosaceus Pediococcus pentosaceus 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	LC-G33	Latilactobacillus curvatus	Latilactobacillus curvatus	1.0*1011
BQ-G66 Bifidobacterium adolescentis Bifidobacterium adolescentis 1.0*10 ¹¹ ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PP-G15 Pediococcus pentosaceus Pediococcus pentosaceus 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	BI-G201	Bifidobacterium longum subsp.infantis	Bifidobacterium longum subsp. infantis (B.infantis)	1.0*1011
ST-G30 Streptococcus salivarius subsp. thermophilus Streptococcus thermophilus 4.0*10 ¹¹ LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PP-G15 Pediococcus pentosaceus Pediococcus pentosaceus 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	BB-G95	Bifidobacterium breve	Bifidobacterium breve	3.0*1011
LLL-G25 Lactococcus lactis subsp.lactis Lactococcus lactis subsp. lactis 2.0*10 ¹¹ LLC-G42 Lactococcus cremoris Lactococcus lactis subsp. cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PP-G15 Pediococcus pentosaceus Pediococcus pentosaceus 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	BQ-G66	Bifidobacterium adolescentis	Bifidobacterium adolescentis	1.0*1011
LLC-G42 Lactococcus cremoris 2.0*10 ¹¹ PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PP-G15 Pediococcus pentosaceus Pediococcus pentosaceus 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	ST-G30	Streptococcus salivarius subsp. thermophilus	Streptococcus thermophilus	4.0*1011
PA-G73 Pediococcus acidilactici Pediococcus acidilactici 2.0*10 ¹¹ PP-G15 Pediococcus pentosaceus Pediococcus pentosaceus 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides 1.0*10 ¹¹	LLL-G25	Lactococcus lactis subsp.lactis	Lactococcus lactis subsp. lactis	2.0*1011
PP-G15 Pediococcus pentosaceus Pediococcus pentosaceus 2.0*10 ¹¹ LM-G27 Leuconostoc mesenteroides subsp.mesenteroides Leuconostoc mesenteroides subsp. mesenteroides 1.0*10 ¹¹	LLC-G42	Lactococcus cremoris	Lactococcus lactis subsp. cremoris	2.0*1011
LM-G27 Leuconostoc mesenteroides subsp. mesenteroides Leuconostoc mesenteroides subsp. mesenteroides 1.0*10 ¹¹	PA-G73	Pediococcus acidilactici	Pediococcus acidilactici	2.0*1011
	PP-G15	Pediococcus pentosaceus	Pediococcus pentosaceus	2.0*1011
	LM-G27	Leuconostoc mesenteroides subsp.mesenteroides	Leuconostoc mesenteroides subsp. mesenteroides	1.0*1011
BC-G44 Weizmannia coagulans Bacillus coagulans 1.0*10 ¹¹	BC-G44		Bacillus coagulans	1.0*1011
EP-GA65 Enterococcus faecalis Enterococcus faecalis 2.0*10 ¹¹	EP-GA65	Enterococcus faecalis	Enterococcus faecalis	2.0*1011
SF-GA12 Enterococcus faecium Enterococcus faecium 2.0*10 ¹¹	SF-GA12	-		2.0*1011
SD-G19 Saccharomyces boulardii Saccharomyces boulardii 2.0*10 ¹⁰	SD-G19		Saccharomyces boulardii	2.0*1010
BS-GA28 Bacillus subtilis Bacillus subtilis 8.0*10 ¹¹	BS-GA28	Bacillus subtilis	Bacillus subtilis	8.0*1011
BL-GA26 Bacillus licheniformis Bacillus licheniformis 5.0*10 ¹¹	BL-GA26	Bacillus licheniformis	Bacillus licheniformis	5.0*1011

Storage and shelf life:

Probiotics powder can be stored at -18°C or lower.

Weizmannia coagulans can be stored at room temperature.

Shelf life: 24 months

Packing specifications:

High resistance composite aluminum foil bag, 500g/bag, 2kg/bag, 5kg/bag.

Remarks:

- (1) All strains have undergone genetic identification, and partial strains have completed complete gene sequencing.
- (2) Registered patent collection at an international culture collection center.
- (3) Single-strain powder, mixed-strain powder, or premix formulation can be provided according to customers' needs.
- (4) Complete datasheets can be provided upon request.



Strains	Functional Research and Report
	③ Laxative effect (★)
	Improve superficial gastritis and relieve stomach discomfort (★)
Lactobacillus acidophilus LA-G80	 © Chemical liver injury protection (★) Liver care (☆) Improving cholesterol (★)
	Lower blood sugar (\triangle) Lowering blood-fat as assistance (\triangle)
	\circ Antioxidant (\triangle)
Diff. I	Alleviate functional constipation (○)
Bifidobacterium animalis subsp. Lactis BL-G101	 Alleviate gluten intolerance (▲)
	Improve immunity and Auxiliary treatment for psoriasis (▲, +)
Lacticaseibacillus rhamnosus Lr-G14	■ Inhibit Candida albicans growth (▲) Inhibit Candida albicans biofilm formation (▲)
	③ Improve intestinal flora variety (▲) Inhibit Helicobacter pylori (▲)
	○ Nephrotic syndrome intervention, Immune regulation (▲, +)
Lactiplantibacillus plantarum Lp-G18	Improving blood lipid levels (▲, +) Improving blood sugar levels (▲)
	 ● High-yield glutamine synthetase patent (☆)
	Anti-aging, Increase total antioxidant level (▲)
I	Improve oral monocyte inflammation (▲, +) Periodontal fibroblast inflammation (▲, +)
Lacticaseibacillus paracasei LPc-G110	Inactivated bacteria also active (▲)
Bifidobacterium longum subsp. Longum BL-G301	Improve uremia (▲, +) Improve chronic nephritis (▲, +) Alleviate gluten intolerance (▲
	§ Laxative effect (★)
Bifidobacterium bifidum BB-G90	Improving liver damage (★) Liver care (☆)
	② Anti-plasmodium antigen (△) Alleviate gluten intolerance (▲)
Ligilactobacillus salivarius LS-G60	Improve breath (▲, +) Inhibit oral bacteria (▲, +)
Lactobacillus gasseri LG-G12	Increased brown adipose tissue (▲)
Laciobaciius gasseri LG-G12	Assisted in lowering triglycerides and very low-density lipoproteins (▲)
Lactobacillus johnsonii LJ-G55	■ Inhibiting Candida albicans growth (▲) Inhibiting Candida albicans biofilm formation (▲)
	⑤ Inhibit Helicobacter pylori(○)
Limosilactobacillus reuteri LR-G100	
	 Relieve traumatic oral lesions (☆) Colonization and proliferation in female intimate care (▲)
Lactiplantibacillus plantarum ZJUF T17	Alleviate weight gain (☆, ▲)
Lactiplantibacillus plantarum ZJUF T34	Alleviate constipation (☆)
Lactiplantibacillus plantarum YS1	§ Alleviate constipation (☆)

Gastrointestinal healthImmune healthMetabolic healthOthers

Note +: Clinical research; ☆: Patented strain; ★: Health food function test; △: Functional testing of third party organizations;

 \blacktriangle : International papers; $\circ :$ Domestic papers.

Heat Resistant Probiotics

The King of Probiotics: Weizmannia coagulans BC-G44

Collection number: CCTCC.M.2018445 Derived from fermented yellow peaches



Stability

Resistant to stomach acid, bile salt, high temperature, and exhibits good storage stability at room temperature

Health Benefits

- · Boost immunity
- · Athletic nutrition

Application Advantages

Can be used in various dosage forms, such as powder, tablets and capsules and applied to many kinds of food, such as candy, bakery, chocolate, coffee and tea



Outstanding Features

In addition to the acid production function of common lactic acid bacteria, it also has the features below.

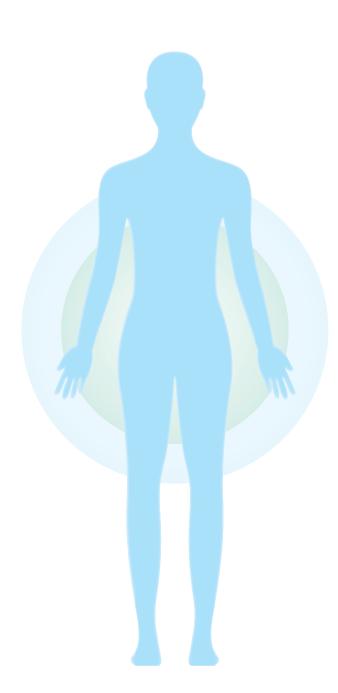
High stability 96.4%

Resistant to high temperature 80-140°C

Resistant to stomach acid pH 2.0

Resistant to bile salt 0.3%

Health Applications of Probiotics



- Mental health; Sleep promotion
- O Allergic rhinitis alleviation
- Oral health care
- Skin health
- Hangover and liver protection
- O Support gastric comfort
- Anti-Helicobacter pylori
- Support bowel health
- © Relieve constipation
- Weight management
- O Support vaginal health
- © Support healthy blood sugar level
- O Children's health
- Anti-allergy
- Immunity
- Menopause health
- Management of blood sugar
- Relief of antibiotic-associated diarrhea and adverse reactions

Popular tracks of health application



Gastrointestinal health

(Protect the stomach mucosa, moisten bowel)

Strains: Lactobacillus acidophilus LA-G80, Bifidobacterium animalis subsp. lactis BL-G101, Bifidobacterium bifidum

BB-G90, Bifidobacterium longum subsp.longum BL-G301, Lactiplantibacillus plantarum ZJUF T34,

Lactiplantibacillus plantarum Lp-G18, Lactiplantibacillus plantarum YS1

Literature: The relaxing bowel effect of composite probiotic powder MIX -G200. Chinese Journal of Microecology, Jun. 2011, Vol. 23 No. 6

Evaluation of the health benefits of consumption of extruded tannin sorghum with unfermented probiotic milk in individuals with chronic kidney disease. Food

Research International Volume 107, May 2018, Pages 629-638



Immunity (Immunity, Support inflammatory response)

Strains: Bifidobacterium animalis subsp. lactis BL-G101、Lactiplantibacillus plantarum Lp-G18、Lacticaseibacillus rhamnosus Lr-G14、

Bifidobacterium bifidum BB-G90、Lacticaseibacillus paracasei LPc-G110、Bifidobacterium longum subsp.longum BL-G301

Literature: Effect of Multi-Strain Probiotic Supplementation on URTI Symptoms and Cytokine Production by Monocytes after a Marathon Race: A Randomized,

Double-Blind, Placebo Study. Nutrients 2021, 13, 1478. https://doi.org/10.3390/nu13051478



Female intimate care (Promote microbial balance)

Strains: Lactobacillus crispatus Lc-G22, Lactobacillus gasseri LG-G12, Lactobacillus johnsonii LJ-G55, Lactobacillus acidophilus

LA-G80, Lacticaseibacillus rhamnosus Lr-G14

Literature: AVALIAÇÃO IN VITRO DA AÇÃO MICROBICIDA DE LACTOBACILLUS SPP. SOBRE CANDIDA SPP. 2020



Oral care (Freashen breath, promote oral microbial balance, support oral health)

Strains: Ligilactobacillus salivarius LS-G60, Lacticaseibacillus paracasei LPc-G110

Literature: Are Lactobacillus salivarius G60 and inulin more efficacious to treat patients with oral halitosis and tongue coating than the probiotic alone and placebo? A randomized clinical trial. Journal of Periodontology .2020, 91,6: 775-783



Anti-Helicobacter pylori (Inhibit Helicobacter pylori)

Strains: Lactobacillus acidophilus LA-G80, Bifidobacterium bifidum BB-G90, Limosilactobacillus reuteri LR-G100,

Lactiplantibacillus plantarum Lp-G18

Literature: Phenotype investigation on a strain of lactobacillus reuteri. China dairy industry. 2012,03



Liver care (Protective effect on acute alcoholic gastric mucosa injury and chemical liver injury)

Strains: Lactobacillus acidophilus LA-G80, Bifidobacterium bifidum BB-G90

Literature: Function experiment report of health food in China



Antiallergy (Aid gluten-sensitive digestion)

Strains: Bifidobacterium animalis subsp. lactis BL-G101, Bifidobacterium bifidum BB-G90, Bifidobacterium longum subsp.longum

BL-G301、 Lactobacillus acidophilus LA-G80

Literature: Digestion of Intact Gluten Proteins by Bifidobacterium Species: Reduction of Cytotoxicity and Proinflammatory Responses, J. Agric. Food Chem. 2020, 68, 4485-4492



Blood glucose management (Improve metabolic syndrome, support healthy blood lipids & sugar levels)

Strains: Lacticaseibacillus rhamnosus Lr-G14, Lactiplantibacillus plantarum Lp-G18, Bifidobacterium animalis subsp. lactis

BL-G101、Lactobacillus acidophilus LA-G80、Lacticaseibacillus casei LC-G11、Lactobacillus johnsonii LJ-G55、

Limosilactobacillus reuteri LR-G100, Bifidobacterium longum subsp.longum BL-G301, Bifidobacterium bifidum BB-G90

Literature: Rationale and Design of a Randomized Controlled Trial to Evaluate the Effects of Probiotics during Energy Restriction on Blood Pressure, Body Composition, Metabolic Profile and Vascular Function in Obese Hypertensive Individuals. Artery Research Vol. 26(2); June (2020)



Weight management (Support weight management, Alleviate weight gain)

Strains: Lactiplantibacillus plantarum ZJUF T17、Lactiplantibacillus plantarum ZJUF T34、Lactobacillus acidophilus LA-G80、Lactobacillus gasseri LG-G12、Bifidobacterium animalis subsp. lactis BL-G101、Lactiplantibacillus plantarum

Lp-G18、 Bifidobacterium longum subsp.longum BL-G301

Literature: Antibiotic Followed by a Potential Probiotic Increases Brown Adipose Tissue, Reduces Biometric Measurements, and Changes Intestinal Microbiota Phyla in Obesity. Probiotics and Antimicrobial Proteins, https://doi.org/10.1007/s12602-021-09760-0

Lactobacillus plantarum helps to suppress body weight gain, improve serum lipid profile and ameliorate low-grade inflammation in mice administered with glycerol monolaurate. Journal of Functional Foods 53 (2019) 54-61

ODM | CDMO

BioGrowing provides customized and high-quality solutions.

BioGrowing is one of the largest probiotics production bases in Asia.

- © Class 100,000 cleanroom production workshop
- © More than 10 sets of intelligent production system
- © 1200 tons of lactic acid bacteria freeze-dried powder per year







- © Advanced equipment: low-temperature vacuum freeze dryer, freezing high-speed centrifuge, automatic fermentation system.
- © Patented technology: high-density fermentation technology, high stability patent embedding protection technology, high activity freeze-dried bacteria powder technology, cryogenic granulation technology.



Professional R&D



Multiple recipes



Lean production



Packaging customization



Full control



Qualification support

Package Systems

Capsules

Types			Descriptions
			Vegetable capsules (HPMC)
Capsule shell			Acid-resistant vegetable capsules
			Gelatin capsules
	Bottles		PET bottles
	Dotties		Glass bottles
Outer packing	Blisters	Size 00#	Cold forming Alu-Alu blisters (500-700mg)
		Size 0#	PVC/PVDC blisters (About 500mg)
		Size 1#	Alu-Alu blister (320-380mg)
		Size 2#	Alu-Alu blister or bottles (220-250mg)

^{*} Other capsule sizes are available on inquiry.



Cold forming Alu-alu blisters (95×146 mm)



PVC/PVDC (62×95 mm)



Alu-alu blisters (76×132 mm)



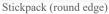
Capsule bottle

Package Systems

Sachets

Packing	Si	ize	Sh	ape	Packing material		
weight	Unfolded size	Finished size	Jagged edge	Round edge			
	90×58 mm	90×24 mm	-	√			
1-1.5g	85×70 mm	85×27 mm	√	√			
	80×76 mm	80×29 mm	√	-			
	110×58 mm	110×24 mm	-	√			
2-2.5g	110×60 mm	110×25 mm	√	-			
	100×70 mm	100×27 mm	√	√			
	120×58 mm	120×24 mm	-	√	PE/Alu/PET		
3-3.5g	120×60 mm	120×25 mm	√	-			
	110×70 mm	110×27 mm	√	√			
5g	128×76 mm	128×29 mm	√	-			
15g	150×92 mm	150×39 mm	√	-			
20g	160×135 mm	160×135 mm 70×135 mm		-			
30-38g	160×165 mm	70×165 mm	√	-			
1.5g	75×100 mm	75×50 mm	-	-			
2g	80×100 mm	80×50 mm	-	-	Three-sides sealed		
4g	90×120 mm	90×60 mm	-	-	rectangular sachet		
6g	90×140 mm	90×70 mm	-	-			







Three-sides sealed rectangular sachet

Shaped bottle

① Specification: 2g
Diameter: 32mm, bottle height: 30mm (can be customized)

② Specification: 2g
Diameter: 36mm, bottle height: 18mm (can be customized)

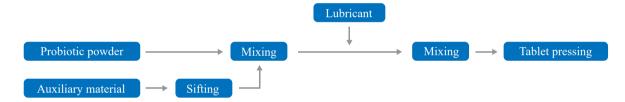




Tablets

Probiotic tablets are flaky preparations made by mixing probiotic powder and excipients evenly.

Process flow



Technical parameters

The punching die count	31
Adjustable pressure sheet	100 kN
Adjustable pressure sheet diameter	25 mm
Adjustable filling depth	19 mm
Adjustable tablet thickness	10 mm
Adjustable production capacity	85000 tablets/h

Packaging

Circular tablet: 1.0-1.5g/tablet, 1 tablet in each bag Oval tablet: 1.0-1.2g/tablet, 10 tablets per blister



Applications







Tablet candy

Chewing tablets

Buccal tablets

Finished Products

Probiotic Capsules



Female Care Capsules

Spec:

- 10 Billion,
- 500mg capsule



IBS Care Capsules

Spec:

- 30 Billion,
- 500mg capsule



Anti-Anxiety Capsules

Spec:

- 10 Billion,
- 500mg capsule



Vaginbiol Capsules

Spec:

- 20 Billion,
- 500mg capsule



Dynabiotics Capsules

Spec:

- 10 Billion,
- 500mg capsule



Biotic-Restore Capsules

Spec:

- 20 Billion,
- 500mg capsule



Omebiotix Capsules

Spec:

- 40 Billion,
- 500mg capsule



Biotic Plus Capsule

Spec:

- 20 Billion,
- 250mg capsule

Stated health benefits of these products have not been evaluated by the Food and Drug Administration Authority. These products are not intended to diagnose, treat, cure, or prevent any disease.

Finished Products

Probiotic Solid Drinks



Wisdom+ Live Probiotic Powder

Spec:

- 20 Billion,
- 2.0g sachet



Pro-Immuno Live Probiotic Powder

Spec:

- 10 Billion,
- 2.0g sachet



Anti-allergy Live Probiotic Powder

Spec:

- 50 Billion,
- 2.0g sachet



Vaginbiol Live Probiotic Powder

Spec:

- 50 Billion,
- 3.0g sachet



Intest Booster Live Probiotic Powder

Spec:

- 30 Billion,
- 2.0g sachet



Stomach Care Live Probiotic Powder

Spec:

- 20 Billion,
- 2.0g sachet



Soberbiotix Probiotic Powder

Spec:

- 50 Billion,
- 2.0g sachet



Slim+ Live Probiotic Powder

Spec:

- 20 Billion,
- 2.0g sachet

Stated health benefits of these products have not been evaluated by the Food and Drug Administration Authority. These products are not intended to diagnose, treat, cure, or prevent any

BioGuard® Starter Cultures (For Industrial Use)

Direct Vat Set cryogenic culture

The product categories include Direct Vat Set cultures and Direct Vat Set cryogenic cultures.

Direct Vat Set cryogenic cultures are characterized by stable fermentation time and high viability and are superior to traditional Direct Vat Set in many aspects, such as quick dissolution, convenient operation, and low cost.

Three series of starter cultures



DVS Starter Culture

Used in yogurt, probiotic yogurt, lactic acid bacteria beverage, small fresh cheese, sour cream, etc. Thermophilic dairy starter cultures GF 231 / GF 468 / GF 655 / GF 665 GF 668 / GF 669 / GF 686 / GF 689 GF 859 / GF 867 / GF 868 / GF 888 GF 968 / GF-BY01 / GF-BY02

Mesophilic dairy starter cultures GF 218 / GF 227 / GF 927 / GF 937



DVS Plant Based Starter Culture

Used in fermented fruit and vegetable juices, pickles, fermented soy milk, fermented plant beverages, etc.

Plant based starter cultures GS 485 / NP 108 / Lp-G18



DVS Probiotic Starter

Fermented products strengthen the functions of probiotics.

Drinking yoghurt starter cultures GF 101 / GF 201

Biological protective agents GP 101

BioGuard® Starter Cultures (DVS for industrial use)

		Culture type										Charact			
Name	ST	LB	LL.L	LL.C	LC	LA	BL	LPc	Lr	Lp	Acidification speed	Viscosity	Flavor	Post-acidity	Applications
Thermophilic dairy starter cultures															
GF231	+	+									***	**	***	****	
GF468	+	+									***	**	**	***	Set yogurt
GF655	+	+									***	**	****	***	
GF665	+	+									***	***	***	***	
GF668	+	+									***	***	****	***	Set yogurt Stirred yogurt
GF669	+	+									****	***	***	***	Stirred yogurt
GF686	+	+									****	***	***	***	
GF689	+	+									***	***	****	*	
GF859	+	+									***	***	***	**	Set yogurt
GF867	+	+									***	***	**	**	Stirred yogurt
GF868	+	+									***	****	****	**	Drinkable yogurt
GF888	+	+									***	****	****	*	
GF968	+	+									***	****	**	**	
GF-BY01	+										**	***	****	*	Drinkable veguet
GF-BY02	+										**	****	***	*	Drinkable yogurt
Mesophilic	dairy st	tarte	r cultu	ıres											
GF 218			+	+							*	*	***	**	Soft curd, cottage cheese
GF 227	+		+	+							**	**	**	**	Soft curd
GF 927	+		+	+							***	****	**	***	Soft curd
GF 937	+		+	+							***	****	**	***	Sour cream
Probiotic yo	gurt be	evera	age st	arter c	ultu	res									
GF 101			+	+							*	*	***	**	Lactic acid
GF 201		+	+	+							**	*	**	***	Bacteria drink
Plant based	starte	r cult	tures												ı
GS 485	+	+													
NP 108	т -	Т				+				+	Plant-bas	ed ferme	entation, o	data shee	t available
Lp-G18						Г				+	on requests.				
Biological p	rotootii	VO 01	ulturo							Т.	ļ.				
GP 101	TOLECTI	ve ci	uituie	>				+	+	+	Inhibit the	growth of u	molds and	veast to n	rolong the shelf life.
Probiotic cu	ıltııros									-	Annoit trie	3.04441 011		, 500t, to p	. s. srig the shell life.
GFAB101						+	+				Can be ad	ded in the	fermented	food as pr	ohiotics
GFAD IU I			+ + Can be added in the fermented food as probiotics												

- (1) Thermophilic Starter Cultures: Culture fermentation temperature range preferred at 37°C~44°C.
- (2) Mesophilic Starter Cultures: Culture fermentation temperature range preferred at 25°C~37°C.
- (3) Culture's composition: ST: Streptococcus salivarius subsp. thermophilus, LB: Lactobacillus delbrueckii subsp. bulgaricus, LL.L: Lactococcus lactis subsp. lactis, LL.C: Lactococcus cremoris, LA: Lactobacillus acidophilus, BL: Bifidobacterium animalis subsp. lactis, LC: Lacticaseibacillus casei, LPc: Lacticaseibacillus paracasei, Lr: Lacticaseibacillus rhamnosus, Lp: Lactiplantibacillus plantarum.

 (4) Characters: *\displantibacillus \displantibacillus \disp
- (5) Some starter cultures can be provided in deep-frozen granule form.



BioGuard® Starter Cultures (Cheese starter cultures)

			Cu	lture ty	/pe			Characteristics				
Name		LB	LL.L	LL.C	LL.D	L	LH	Acidification speed	Viscosity	Flavor	Applications	
Thermophilic starter cultures												
ST231	+							***	**	*	D 4 51 4 H	
TC231	+	+						***	**	**	Pasta filata, mozzarella	
ST320	+							***	**	*	Hard cheese	
ST330	+							***	**	*	Semi hard cheese	
LH15							+			****		
LH16							+			****	Ripening culture	
Mesophilic dairy starter cultures												
GF 218			+	+				*	*	***	Soft curd, cottage cheese	
GF 227	+		+	+				**	**	**	Soft curd	
GF 927	+		+	+				***	****	**	Soft curd	
GF 937	+		+	+				***	****	**	Sour cream	

Remark:

- (1) Thermophilic Starter Cultures: Culture fermentation temperature range preferred at 37°C~44°C.
- (2) Mesophilic Starter Cultures: Culture fermentation temperature range preferred at 25°C~37°C.
- (3) Culture's composition: ST: Streptococcus salivarius subsp. thermophilus, LB: Lactobacillus delbrueckii subsp. bulgaricus, LL.L: Lactococcus lactis subsp. lactis, LL.C: Lactococcus cremoris, LL.D: Lactococcus lactis subsp. lactis biovar diacetylactis, L: Leuconostoc mesenteroides subsp. mesenteroides, LH: Lactobacillus helveticus
- (4) Characters: \star Very Low $\star\star$ Low; $\star\star\star$ Medium; $\star\star\star\star$ High; $\star\star\star\star\star$ Very High.
- (5) Some starter cultures can be provided in deep-frozen granule form.





- APAC TOP3 in immunity probiotic
- APAC TOP5 in digestion probiotic
- Annual export volume ranks among the top
- Owns 220+ international air routes to ensure the activity

BIOGROWING | Reliable for a Better World.



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