



Probiotic Series

*Product Innovation for
a Healthy Microbiome**



*Featuring New Products including
the PureBi•Ome™ Line*

*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

Probiotic Excellence

*Every aspect of Pure Encapsulations' probiotic innovation, from formulation to manufacturing, is designed to maximize clinical effectiveness. Our long-standing commitment to probiotic excellence is defined by seven key tenets:**

- ✓ *Viability Assurance:* From cold receipt of raw materials to packaging of finished goods, our proprietary Viability Triad (Figure 1) carefully controls for moisture, temperature, and timing on site during manufacturing.
- ✓ *Strategic Sourcing:* Strains are sourced based on stability data, including acid, bile and pancreatin tolerance as well as adherence to intestinal cells.
- ✓ *Specialized Strains:* These include strains for cardiovascular, emotional well-being, immune and intensive G.I. support.*
- ✓ *Advanced Technologies:* A variety of in-house and outsourced technologies including microencapsulation, a proprietary freeze-drying technique, and acid resistant capsules offer enhanced delivery options.
- ✓ *Authenticated Strains:* Strain authenticity is validated via DNA sequencing and Fatty Acid Methyl Ester (FAME) analysis.
- ✓ *Independent Laboratory Testing:* Products are tested for potency and contamination.
- ✓ *Cold Packaging:* All probiotics are shipped in unique foam brick cooler packs to ensure viability upon delivery.

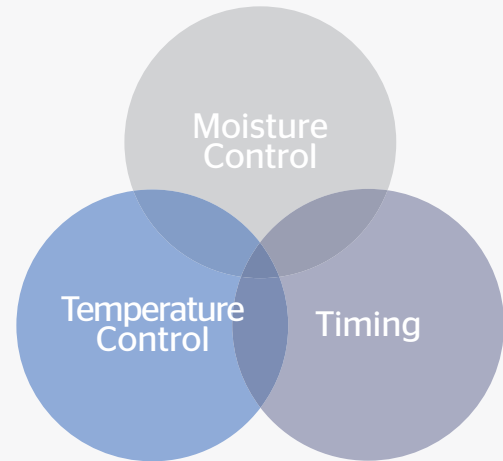


Figure 1: The Viability Triad

The Pure Encapsulations Probiotic product line includes:

- ✓ Single and multi-strain formulations
- ✓ High potency products
- ✓ Shelf-stable options
- ✓ Condition-specific selections
- ✓ Advanced freeze-dried, delayed release delivery forms

Viability Triad

Probiotics are dynamic organisms with unique requirements and sensitivities. They demand a tightly regulated manufacturing process exceeding GMP compliance to guarantee survival and stability. Every phase of handling and manufacturing at Pure Encapsulations addresses a triad of viability determinants - *temperature control*, *moisture control* and *timing*.

1 Temperature Control

Freezing and thawing probiotics is a common cause of condensation. Pure Encapsulations circumvents this issue with a precise tempering protocol, gradually bringing probiotic raw materials from storage to manufacturing temperature. We purchase small packages of materials, delivered in refrigerated trucks. Smaller packages allow more precise tempering and reduce condensation risk. Finished products are stored in 4°C walk-in coolers until shipped. Each shipment is packaged in an insulated cooler with foam ice bricks.

2 Timing

Upon receipt of raw material, stock is rapidly entered into our system and sampled under tight controls. Weighing and blending are also executed within strict time limits to minimize exposure to ambient moisture.

3 Moisture Control

Relative humidity is monitored and recorded in all rooms every two hours, including the warehouse, walk-in coolers and production rooms. Our blending rooms use compressed dry air at a low, tightly-controlled dew point. During the encapsulation process, moisture must also be minimized. As a result, our probiotics are formulated to include a proprietary rice base to minimize water activity (A_w), which refers to the ability of water to interact with microorganisms (Figure 2).

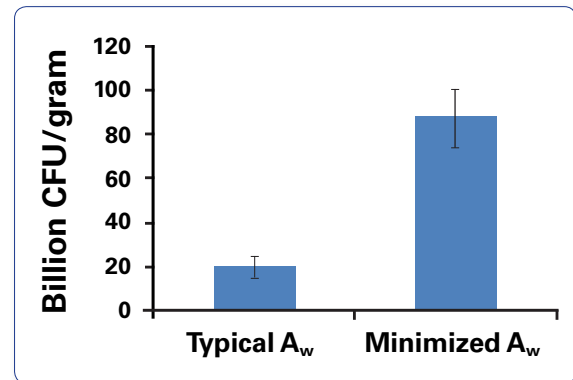


Figure 2: Minimizing water activity (A_w) with a proprietary rice-based moisture control enhances finished product potency.

Sourcing, Identity and Potency Assurance

Strategic sourcing

Suppliers must provide proof of genetic identity testing as well as stability data. They must also provide evidence of gastric, bile, and pancreatic enzyme tolerance. The capacity of probiotics to withstand these conditions is among the principal criteria in the sourcing of Pure Encapsulations' probiotics (Table 1).

Specialized strains

We offer exclusive and first-to-market condition-specific strains, including strains for cardiovascular support, emotional well-being and immune health.*

Proprietary technology

Through strategic partnerships, Pure Encapsulations is able to offer proprietary technologies, including a patented microencapsulation process for shelf stability and improved strain resistance, and a freeze-drying technique allowing for the combination of bioactives with probiotics without compromising viability due to moisture content. This "freeze-dried" technology is reflected in our new PureBi•Ome™ line.

Strain authentication

Probiotics are genetically and functionally diverse, and minor variations can impact biological activity. The expanding taxonomic range of clinically relevant species demands precise identification. Pure Encapsulations utilizes DNA sequencing to verify genus and species by matching our results with a referenced genetic fingerprint. Fatty Acid Methyl Ester, or FAME, analysis is also performed to authenticate specific strains comparing their fatty acid composition against a reference standard.

Independent laboratory testing

In addition to strain authentication, qualified, independent labs verify potency of raw materials and finished products using the most current quantitative methods for enumerating total colony forming units, or CFU. In addition, raw materials and finished products are third-party tested for yeast, mold and pathogens to ensure purity.

Cold packaging

We include ice packs in all shipments carrying probiotics, including our shelf-stable probiotic products. Our unique foam brick cooler packs sustain a cool package environment over a 45-hour period to ensure probiotic viability upon delivery to your door.



Advanced Laboratories, Inc.
"Building on Analytical Excellence"

Excellence In Sourcing and Formulation

Probiotic Genus, Species, Strain	Acid Tolerance*	Bile Tolerance*	Pepsin resistance	Pancreatin Tolerance	Adherence to Intestinal Cells
Bifidobacterium bifidum (NCIMB 30153)	+++++	++++	+++++	+++++	N/A
Bifidobacterium breve (Bb-O3)	+	+	N/A	N/A	++
Bifidobacterium lactis (BI-O4)	+++++	+++++	N/A	N/A	+++
Bifidobacterium lactis (NCIMB 30172)	++	+++++	+++++	+++	N/A
Bifidobacterium longum (BI-O5)	+++	++++	N/A	N/A	+++
Bifidobacterium longum (Rosell-175)	+++++	+	N/A	N/A	++
Lactobacillus acidophilus (La-14)	+++++	+++++	++++	++++	++++
Lactobacillus acidophilus (NCIMB 30156)	+++++	+++++	+++++	+++++	N/A
Lactobacillus acidophilus (NCIMB 30157)	+++++	+++++	+++	+++++	N/A
Lactobacillus casei (Lc-11)	++++	++++	N/A	N/A	+++
Lactobacillus helveticus (Rosell-52)	+++++	+	N/A	N/A	++++
Lactobacillus plantarum (Lp-115)	+++++	+++++	+++	++++	+++
Lactobacillus rhamnosus (Lr-32)	+++++	+++++	+	++++	++++
Lactobacillus salivarius (Ls-33)	+++	++++	+	++++	+++
Lactobacillus sporogenes	+++++	+++++	+++++	+++++	N/A
Saccharomyces boulardii	+++++	+++++	+++++	+++++	N/A
Streptococcus thermophilus (St-21)	+	+++++	N/A	N/A	++++

Table 1: Survival and Tolerance of Pure Encapsulations' Probiotic Strains

Legend — +++++ Excellent
 ++++ Very good
 +++ Good
 ++ Average
 + Fair
 N/A information not available

* Survival in acid — +++++ >90%
 (pH=2) or bile +++++ 80-89%
 +++ 70-79%
 ++ 60-69%
 + < 60%

Data is derived from a compilation of supplier and published studies of simulated gastric and intestinal conditions at physiological pH.

Excellence In Manufacturing: A Multi-Step Process

Pure Encapsulations' onsite probiotic manufacturing constitutes a multi-step application of the viability triad, addressing every step of handling and manufacturing by controlling temperature, timing and moisture through tightly regulated procedures.

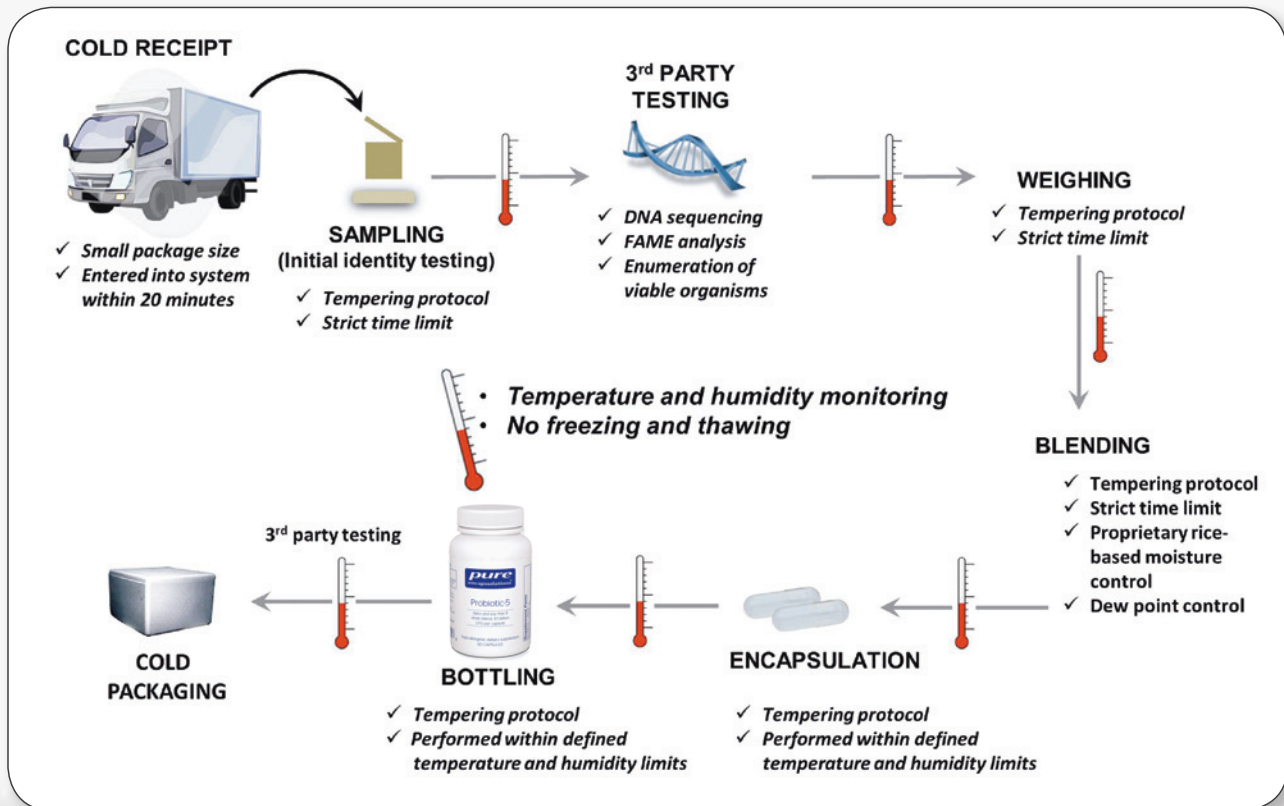


Figure 3: Map of controlled operations ensuring viability.

PureHeart™ Probiotic NEW

Shelf-Stable; Acid-Resistant Capsules

Species:

- Lactobacillus reuteri (NCIMB 30242)

Potency: 2.9 billion CFU/capsule

Clinical applications: Cardiovascular health, lipid metabolism, and blood flow*

each vegetarian capsule contains  v O

Lactobacillus reuteri NCIMB 30242.....2.9 billion CFU

other ingredients: rice starch, vegetarian capsule (cellulose, gellan gum, water)

This formula does not require refrigeration to maintain culture viability.

2 capsules daily, in divided doses, with meals.

PureHeart™ Probiotic	Quantity	Order Code
	60	PHP6

ProbioMood NEW

Convenient, Shelf-Stable, Single-Serving Stick Packs

Species:

- Lactobacillus helveticus Rosell-52 ME
- Bifidobacterium longum Rosell-175 ME

Potency: 3 billion CFU/capsule

Clinical applications: Emotional well-being and relaxation; Maintains healthy urinary cortisol levels*

each stick pack (1.5 g) contains

probiotic blend.....3 billion CFU

providing:

Lactobacillus helveticus Rosell-52 ME

Bifidobacterium longum Rosell-175 ME

other ingredients: xylitol, maltodextrin

Contains milk, soy

This formula does not require refrigeration to maintain culture viability.

Take 1 stick pack daily, with or between meals, with or without water.

ProbioMood	Quantity	Order Code
	30 stick packs	PBMB3

In a 30-day double-blind placebo-controlled study involving 55 subjects ages 30-60, ProbioMood supplementation was associated with support for enhanced mood.*

The Product Line – NEW

PureBi•Ome™ Product Line

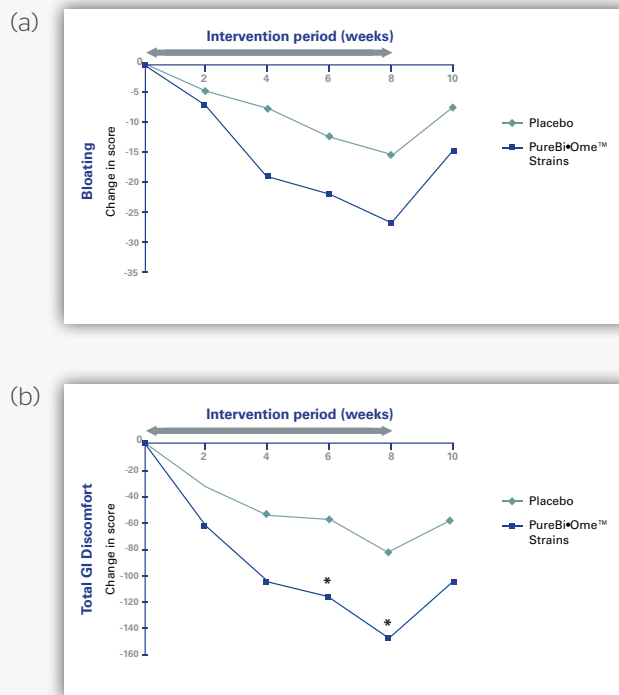
Utilizes the proprietary PureBi•Ome™ freeze-drying technology, to reduce moisture and preserve probiotic potency when combined with other active ingredients

Features:

- Formulations containing a 4-strain blend clinically studied for over 15 years
 - ✓ Lactobacillus acidophilus (NCIMB 30157)
 - ✓ Lactobacillus acidophilus (NCIMB 30156)
 - ✓ Bifidobacterium bifidum (NCIMB 30153)
 - ✓ Bifidobacterium lactis (NCIMB 30172)
- Probiotics combined with other active ingredients for the first time, including glutamine, cranberry and n-acetyl-L-cysteine for condition-specific support*

Clinical Research:

- In two double-blind, placebo-controlled trials involving 30 and 162 subjects, respectively, supplementation with 25 billion CFU of the PureBi•Ome™ probiotic blend promoted a healthy microflora population in the G.I. tract during or following antibiotic use.*
- In another double-blind, placebo-controlled trial involving 138 elderly individuals, supplementation with 25 billion CFU of the PureBi•Ome™ probiotic blend provided support for healthy intestinal microflora populations and lessened the occurrence of occasional diarrhea.*
- In a 10-week, randomized, placebo-controlled study involving 52 subjects (Figure 4), 25 billion CFU of the PureBi•Ome™ probiotic blend supported quality of life, bloating, satisfaction with bowel habit, and G.I. comfort. Support diminished when supplementation was discontinued.*



*Significant change (p < 0.05)

Figure 4: Mean change in scores for (a) bloating (b) gastrointestinal comfort during the 10-week study*


PureBi•Ome™ Intensive NEW

Species:

- Lactobacillus acidophilus (NCIMB 30157)
- Lactobacillus acidophilus (NCIMB 30156)
- Bifidobacterium bifidum (NCIMB 30153)
- Bifidobacterium lactis (NCIMB 30172)
- Saccharomyces boulardii

Potency: 30 billion CFU/capsule

Clinical applications: Advanced support for microflora balance, bowel motility, and G.I. comfort*

each vegetarian capsule contains  v 00

probiotic blend..... 25 billion CFU

providing:

Lactobacillus acidophilus (NCIMB 30157)

Lactobacillus acidophilus (NCIMB 30156)

Bifidobacterium bifidum (NCIMB 30153)

Bifidobacterium lactis (NCIMB 30172)

Saccharomyces boulardii.....5 billion CFU

other ingredients: hypo-allergenic plant fiber (cellulose), silica, vegetarian capsule (cellulose, water)

This formula requires refrigeration to maintain culture viability.

1 capsule daily, with a meal.

PureBio•Ome™ Intensive	Quantity	Order Code
	30	BIOI3


PureBi•Ome™ G.I. NEW

Species:

- Lactobacillus acidophilus (NCIMB 30157)
- Lactobacillus acidophilus (NCIMB 30156)
- Bifidobacterium bifidum (NCIMB 30153)
- Bifidobacterium lactis (NCIMB 30172)

Potency: 12.5 billion CFU/capsule

Clinical applications: G.I. cellular health, bowel function, and comfort*

each vegetarian capsule contains  v 00

probiotic blend..... 12,5 billion CFU

providing:

Lactobacillus acidophilus (NCIMB 30157)

Lactobacillus acidophilus (NCIMB 30156)

Bifidobacterium bifidum (NCIMB 30153)

Bifidobacterium lactis (NCIMB 30172)

I-glutamine.....500 mg

other ingredients: hypo-allergenic plant fiber (cellulose), potato maltodextrin, silica, vegetarian capsule (cellulose, water)

This formula requires refrigeration to maintain culture viability.

1-2 capsules daily, in divided doses, with meals.

PureBio•Ome™ G.I.	Quantity	Order Code
	60	BIOG6

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The Product Line - NEW


PureBi•Ome™ Detox NEW

Species:

- Lactobacillus acidophilus (NCIMB 30157)
- Lactobacillus acidophilus (NCIMB 30156)
- Bifidobacterium bifidum (NCIMB 30153)
- Bifidobacterium lactis (NCIMB 30172)

Potency: 12.5 billion CFU/capsule

Clinical applications: Healthy detoxification, liver function, and cellular health*

each vegetarian capsule contains  v 00

probiotic blend..... 12.5 billion CFU providing:

- Lactobacillus acidophilus (NCIMB 30157)
- Lactobacillus acidophilus (NCIMB 30156)
- Bifidobacterium bifidum (NCIMB 30153)
- Bifidobacterium lactis (NCIMB 30172)

n-acetyl-L-cysteine.....300 mg

broccoli (brassica oleracea italica) sprout concentrate (whole plant)100 mg (standardized to contain 400 mcg sulforaphane)

milk thistle (silybum marianum) extract (seed).....100 mg (standardized to contain 80% silymarin)

other ingredients: hypo-allergenic plant fiber (cellulose), silica, vegetarian capsule (cellulose, water)

This formula requires refrigeration to maintain culture viability.

1-2 capsules daily, in divided doses, with meals.

PureBi•Ome™ Detox	Quantity	Order Code
	60	BIOD6




PureBi•Ome™ Cranberry NEW

Species:

- Lactobacillus gasseri (CUL-09)
- Lactobacillus acidophilus (NCIMB 30157)
- Lactobacillus acidophilus (NCIMB 30156)
- Bifidobacterium bifidum (NCIMB 30153)
- Bifidobacterium lactis (NCIMB 30172)

Potency: 17.5 billion CFU/capsule

Clinical applications: Genitourinary and intestinal microflora balance, and healthy urinary tract function and comfort*

each vegetarian capsule contains  v 0

probiotic blend..... 17.5 billion CFU providing:

- Lactobacillus gasseri (CUL-09)
- Lactobacillus acidophilus (NCIMB 30157)
- Lactobacillus acidophilus (NCIMB 30156)
- Bifidobacterium bifidum (NCIMB 30153)
- Bifidobacterium lactis (NCIMB 30172)

PACRAN® cranberry (vaccinium macrocarpon) powder (fruit).....300 mg other ingredients: hypo-allergenic plant fiber (cellulose), silica, vegetarian capsule (cellulose, water)

This formula requires refrigeration to maintain culture viability.

2 capsules daily, in divided doses, with meals.

PureBi•Ome™ Cranberry	Quantity	Order Code
	60	BIOC6

PACRAN® is a trademark of Naturex




Probiotic-5
Dairy and Soy-Free

Species:

- Lactobacillus acidophilus (La-14)
- Lactobacillus rhamnosus (Lr-32)
- Bifidobacterium longum (BI-O5)
- Bifidobacterium lactis (BI-O4)
- Bifidobacterium bifidum (Bb-O6)

Potency: 10 billion CFU/capsule

Clinical applications: General immune and G.I. support*

each vegetarian capsule contains  v O
probiotic blend..... 10 billion CFU
providing:
Lactobacillus acidophilus (La-14)
Lactobacillus rhamnosus (Lr-32)
Bifidobacterium longum (BI-O5)
Bifidobacterium lactis (BI-O4)
Bifidobacterium bifidum (Bb-O6)
other ingredients: rice starch, silicon dioxide, vegetarian capsule (cellulose, water)
This formula requires refrigeration to maintain culture viability.
1-2 capsules daily, in divided doses, with or between meals.

Probiotic-5	Quantity	Order Code
	60	PRB6



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Probiotic 50B

Dairy and Soy-Free; Acid-Resistant Capsules

Species:

- Lactobacillus plantarum (Lp-115)
- Lactobacillus acidophilus (La-14)
- Lactobacillus rhamnosus (Lr-32)
- Bifidobacterium lactis (BI-04)
- Bifidobacterium longum (BI-05)

Potency: 50 billion CFU/capsule
Clinical applications: Advanced immune and gastrointestinal support*

each vegetarian capsule contains  v 00
probiotic blend..... 50 billion CFU
providing:
Lactobacillus plantarum (Lp-115)
Lactobacillus acidophilus (La-14)
Lactobacillus rhamnosus (Lr-32)
Bifidobacterium lactis (BI-04)
Bifidobacterium longum (BI-05)
other ingredients: rice starch, vegetarian capsule (cellulose, gellan gum, water)
This formula requires refrigeration to maintain culture viability.
1 capsule daily, with or between meals.

Probiotic 50B	Quantity	Order Code
	60	PR506

PureProbiotic


Allergen-Free

Species:

- Lactobacillus acidophilus (La-14)
- Lactobacillus plantarum (Lp-115)
- Lactobacillus rhamnosus (Lr-32)
- Bifidobacterium lactis (BI-04)
- Bifidobacterium breve (Bb-03)
- Bifidobacterium bifidum (Bb-06)

Potency: 5 billion CFU/capsule

Clinical applications: General immune and G.I. support for highly sensitive individuals*

each vegetarian capsule contains  v 3

probiotic blend..... 5 billion CFU

providing:

- Lactobacillus acidophilus (La-14)
- Lactobacillus plantarum (Lp-115)
- Lactobacillus rhamnosus (Lr-32)
- Bifidobacterium lactis (BI-04)
- Bifidobacterium breve (Bb-03)
- Bifidobacterium bifidum (Bb-06)

other ingredients: rice starch, vegetarian capsule (cellulose, water)

This formula requires refrigeration to maintain culture viability.

Children ages 4 and up: 1 capsule daily, with or between meals.

Adults: 2 capsules daily, with or between meals.

Powder may be removed from capsule and mixed into cold food or beverage.

PureProbiotic	Quantity	Order Code
	60	PPA6

Probiotic 123

Dairy and Soy-Free

Species:

- Lactobacillus acidophilus (La-14)
- Bifidobacterium lactis (BI-04)
- Bifidobacterium bifidum (Bb-06)

Potency: 2.25 billion CFU/serving

Clinical applications: General immune and G.I. support formulated for children*

each scoop (0.5 grams) contains v

probiotic blend..... 2.25 billion CFU

providing:

- Lactobacillus acidophilus (La-14)
- Bifidobacterium bifidum (Bb-06)
- Bifidobacterium lactis (BI-04)

other ingredients: rice starch

serving size: 0.5 g (1 scoop)

servings per container: 160

This formula requires refrigeration to maintain culture viability.

Ages 1 to 3, take 1/2 scoop daily.

Ages 4 and up; take 1 scoop daily, or as directed by a health professional.

Mix with applesauce or yogurt.

Probiotic 123	Quantity	Order Code
	80 g	PRO8

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The Product Line

Probiotic G.I. Shelf-Stable, Dairy and Soy-Free

Species:

- Lactobacillus acidophilus (La-14)
- Lactobacillus salivarius (Ls-33)
- Lactobacillus casei (Lc-11)
- Bifidobacterium lactis (BI-04)
- Streptococcus thermophilus (St-21)
- Bifidobacterium bifidum (Bb-06)

Potency: 10 billion CFU/capsule
Clinical applications: Healthy immune function within the G.I. tract*

each vegetarian capsule contains  v 0
probiotic blend..... 10 billion CFU
providing:

- Lactobacillus acidophilus (La-14)
- Lactobacillus salivarius (Ls-33)
- Lactobacillus casei (Lc-11)
- Bifidobacterium lactis (BI-04)
- Streptococcus thermophilus (St-21)
- Bifidobacterium bifidum (Bb-06)

other ingredients: rice starch, vegetarian capsule (cellulose, water)
This formula does not require refrigeration to maintain culture viability.
1-2 capsules daily, in divided doses, with or between meals.


Probiotic G.I.	Quantity	Order Code
	60	PGI6

Probiotic IMM Shelf-Stable

Species:

- Bifidobacterium longum (BB536)
- Bifidobacterium lactis (BI-04)
- Lactobacillus acidophilus (La-14)
- Lactobacillus casei (Lc-11)
- Lactobacillus plantarum (Lp-115)

Potency: 5 billion CFU/capsule
Clinical applications: Eye, nasal and throat health*

each vegetarian capsule contains  v 3
probiotic blend..... 5 billion CFU
providing:


- Bifidobacterium longum (BB536)
- Bifidobacterium lactis (BI-04)
- Lactobacillus acidophilus (La-14)
- Lactobacillus casei (Lc-11)
- Lactobacillus plantarum (Lp-115)

other ingredients: rice starch, tapioca starch, calcium phosphate, vegetarian capsule (cellulose, water)
Contains milk
This formula does not require refrigeration to maintain culture viability.
1-2 capsules daily, with or between meals.

Probiotic IMM	Quantity	Order Code
	60	PR16

Saccharomyces boulardii


Potency: 5 billion CFU/capsule
Clinical applications: Colon motility and microbial balance*

each vegetarian capsule contains  v 00
Saccharomyces boulardii..... 5 billion CFU
other ingredients: rice starch, vegetarian capsule (cellulose, water)
This formula requires refrigeration to maintain culture viability.
4 capsules daily, in divided doses, between meals.

Saccharomyces boulardii	Quantity	Order Code
	60	SB6

Lactobacillus Acidophilus

Potency: 1.5 billion CFU/capsule
Clinical applications: General immune and G.I. support*


each vegetarian capsule contains  v O
Lactobacillus acidophilus (LA-5)[®] 1.5 billion CFU
other ingredients: rice starch, vegetarian capsule (cellulose, water)
Contains dairy
This formula requires refrigeration to maintain culture viability.
1-3 capsules daily, in divided doses, between meals.

Lactobacillus Acidophilus	Quantity	Order Code
	60	LA6

LA-5[®] is a registered trademark of Chr. Hansen.

Lactobacillus Sporogenes Shelf-Stable

Potency: 1.5 billion CFU/capsule
Clinical applications: General immune and G.I. support*

each vegetarian capsule contains  v O
Lactobacillus sporogenes 1.5 billion CFU
other ingredients: rice starch, vegetarian capsule (cellulose, water)
This formula does not require refrigeration to maintain culture viability.
1-3 capsules daily, in divided doses, between meals.

Lactobacillus Sporogenes	Quantity	Order Code
	60	LS6



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490 Boston Post Rd, Sudbury MA 01776

For more information on our extensive line of probiotics, visit our online newsletter and video series at www.PureEncapsulations.com/education-research/probiotic-focus

PROB414

*Pure Encapsulations brings probiotic innovation to the next level ensuring identity, potency, and viability with advanced technologies and proprietary manufacturing for maximum quality and clinical efficacy.**

