

ProSilience™ HU58™

Scientifically validated, stable probiotic for functional food and beverage applications.

2026

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Growing demand for functional products



OVER 60%

of consumers look for products
with proven digestive and
immune health benefits.*



USD 85 BILLION

~8% CAGR

Estimated global probiotics
market by 2030.*



USD 257 BILLION

4.5% CAGR

Estimated global functional
food market by 2035.*

Industry implication: Differentiation in the functional products category increasingly depends on the proven efficacy of the ingredients used.



Industry challenge: maintaining probiotic efficacy in the final product

- Temperature, processing, moisture, low pH and shelf life can all affect probiotic stability in the final product. 🔥 ⚙️ 💧 🧪 ⏳

Many probiotic products fail to maintain their declared CFU count throughout their shelf life.

- Ingredient stability is essential to deliver credible functional benefits.

ProSilience™ HU58™

A stable probiotic solution for modern functional food and beverage applications

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Superior stability

Withstands demanding processing conditions while maintaining viability throughout the product's shelf life.

Scientifically validated benefits

Clinically documented strain supporting digestive and immune health.

Application flexibility

Compatible with a wide range of functional food and beverage applications.



Stable *Bacillus subtilis* strain

ProSilence™ HU58™

The HU58™ strain has over 10 years of proven use in Megaspore™ probiotic supplements.

Novonesis now makes this strain available in a format specifically developed for food and beverage applications.

ProSilence™ HU58™ product specifications:

Pack size	1 kg	15,000 servings × 1 billion CFU
Live cells per pack	15 trillion cells per pack	1.5 × 10 ¹³ CFU per pack
Format	Powder	Carrier: dextrin
Shelf life	2 years	Ambient temperature
Manufacturing	In-house production	

Kosher, Halal, Vegan, Allergen-Free, Organic Compatible, Non-GMO



Why spore-forming technology makes the difference

ProSilience™ HU58™

Processing resistance

Withstands demanding temperature and processing conditions.

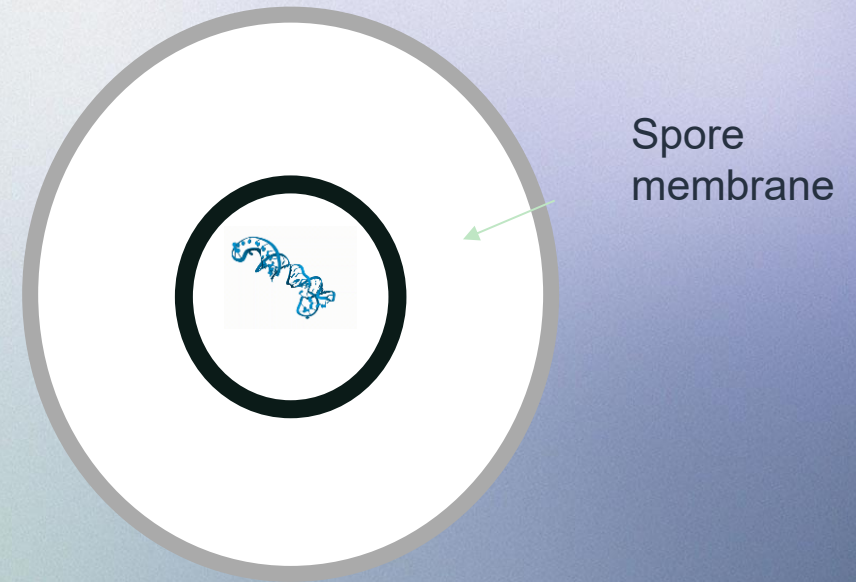
Stability throughout the product's shelf life

Maintains at least 1 billion CFU throughout the product's shelf life.

Activation in the digestive tract

Spores become active under the favourable conditions of the digestive tract.

Protection under demanding conditions



Probiotic spore

Processing • Stability • Activation

Technology designed to meet the real challenges of modern functional products.

ProSilience™ HU58™ – backed by scientific research

Preclinical studies (8)

Designed to survive in the human gut:

- *Tam et al., 2006*
- *Hong et al., 2009a,b*
- *Permpoonpattana et al., 2012*
- *Fajardo-Cavazos et al., 2021*
- *Possemiers et al., 2013*

Supports a healthy gut microbiota:

- *Possemiers et al., 2013;*
Mesnager et al., 2021;
Duysburgh et al., 2019

Supports a healthy immune system:

- *Huang et al., 2008*

Clinical studies (4)

IMMUNE SUPPORT

Reduction of inflammatory markers *Dound et al., 2017:*

HU58® reduced the inflammatory marker IL-6 by 45% and the pro-inflammatory marker IL-5 by 55%.

DIGESTIVE SUPPORT

Supports digestive health:

- *Mehta et al., 2020*

HU58™ reduced the duration of diarrhoea and improved stool quality and consistency compared with placebo.

Ongoing studies

- Digestive health (2026)



Why is ProSilience™ HU58™ valuable for my business and product development?

1. Easy formulation

Compatible with a wide range of manufacturing processes and product categories.

2. Stability in the final product

Maintains viability throughout the product's shelf life.

3. Minimal sensory impact

Does not significantly affect taste, texture or appearance.

4. Higher margin potential

Supports the development of value-added products and premium market positioning.



Compatible applications

1. Kombucha and other fermented beverages
2. Juices and smoothies
3. Alcohol-free beer and wine
4. Functional carbonated beverages
5. Flavoured water
6. Snack bars and breakfast cereals
7. Powdered blends
8. Hot tea beverages



Let's develop the next generation of functional products!

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ProSilience™ HU58™ delivers stability, flexibility and differentiation for modern product innovation.

- Application workshops
- Product samples for evaluation
- Technical support
- Functional product concept development



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