



**CHR HANSEN**

*Improving food & health*

### **Probio-Tec®**

#### **Lactobacillus L. casei 431®**

Chr. Hansen offers multiple application forms of one of our most clinically documented Probio-Tec® strains, Lactobacillus L. casei 431®. L. casei 431® was originally isolated from the stool of an infant and has been used since 1995 as an ingredient in food and dietary supplements worldwide with no reported adverse side effects. L. casei 431® has been studied for its health benefits and has demonstrated clinical efficacy in supporting the body's natural defenses.

#### **Benefits**

Chr. Hansen's L. casei 431® in multiple dosage forms offer the freedom to create a wide range of clinically documented probiotic products.

Benefits to the customer are:

- **Documented Effect:**  
L. casei 431® has documented efficacy and safety
- **Multiple Applications and Dosage Forms:**  
L. casei 431® products are available in different dosage forms as well as customized solutions

## **Probio-Tec®**

Lactobacillus L. casei 431®

Strain deposit number: ATCC55544

### **Documented Effect**

Probio-Tec® L. casei 431® has been used alone and in combination with other Chr. Hansen strains in over 60 studies to date, including human, animal, and in-vitro studies. Subjects have ranged from 5 months of age and upwards with no reported adverse side effects.

Specific L. casei 431® studies from Chr. Hansen's extensive study database include:

- Rizzardini et al. (2012) demonstrates that L. casei 431® enhances the immune response after a vaccination in adults
- de Vrese et al. (2005) demonstrates that L. casei 431® enhances the immune response after a vaccination in adults
- Gaon et al. (2003) shows that L. casei 431® reduces duration and severity of diarrhea in children



**Probio-Tec®... when science matters**



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### Product Positioning

Probio-Tec® L. casei 431® is well documented with many health benefits and a focus on Immune Health. More specifically, it strengthens the natural defense.

Depending on the final product design, dosage, and dosage form, the product can be positioned according to market needs and targeted group.

Some examples of available products are:

- L. casei 431® Bulk Powder Blends
- L. casei 431® Bulk Finished Capsules
- L. casei 431® Stick Packs

Customized L. casei 431® formulations are also available. Please contact your local Chr. Hansen Sales Manager for more information.

### Probio-Tec®... when science matters

Chr. Hansen, which was founded in 1874 by the Danish pharmacist Christian D.A. Hansen, is a trusted supplier of clinically documented probiotic cultures for the dietary supplement, infant formula, and pharmaceutical industries. Science and innovation are the cornerstone elements which allow Chr. Hansen to stand out as a trusted quality supplier of efficacious and safe probiotics.

### Chr. Hansen Probiotics

Being the leading global manufacturer of clinically documented probiotics, Chr. Hansen's vast knowledge and experience within the probiotics industry ensure premium quality, scientifically-based probiotic products. Our probiotics specialists provide the knowledge, inspiration, support, and customized solutions needed to create successful probiotic products.

### Main References

Rizzardini G, Eskesen D, Calder PC, Capetti A, Jespersen L, Clerici M. Evaluation of the immune benefits of two probiotic strains *Bifidobacterium animalis* ssp. *lactis*, BB-12® and *Lactobacillus paracasei* ssp. *paracasei*, L. casei 431® in an influenza vaccination model: a randomised, double-blind, placebo-controlled study. *Br.J.Nutr.* 2012;107:876-84

de Vrese M, Rautenberg P, Laue C, Koopmans M, Herremans T, Schrezenmeir J. Probiotic bacteria stimulate virus-specific neutralizing antibodies following a booster polio vaccination. *Eur.J.Nutr.* 2005;44:406-413

Gaon D, Garcia H, Winter L, Rodriguez N, Quintas R, Gonzalez SN, et al. Effect of *Lactobacillus* strains and *Saccharomyces boulardii* on persistent diarrhea in children. *Medicina* 2003;63:293-298



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