

A Leap Forward in Protein Production

Brevibacillus Expression System

Brevibacillus choshinensis is a gram positive bacterium which has exceptional ability to express transgenic proteins. **The New *Brevibacillus* Expression System, from Takara Bio**, uses the bacterium for high efficiency secretory production. This system produces both eukaryotic and heterologous proteins, in large quantities and in active forms. The *Brevibacillus* system is able to generate protein with a minor amount of extracellular protease.

- **High Yields of Disulfide Bonded Proteins.**
- **High Efficiency Expression and Secretion of Proteins.**
- **Negligible Amounts of Extracellular Protease Produced:** so products remain intact in the culture medium.
- **Biologically Active Proteins.**

Try it with Your Protein Today
Call or Visit our Website

Brevibacillus choshinensis Competent Cell and *Brevibacillus choshinensis* Expression Vectors were developed and manufactured by Higeta Shoyu Co., Ltd. and sold by TAKARA BIO INC. All rights of intellectual property related to these products are owned by Higeta Shoyu Co., Ltd. The use of these products is allowed for academic research only. His-Tag sequences contained in vectors are covered by U.S. Patents No. 5284933 and 5310663 which are owned by Hoffmann-La Roche Inc. and are licensed to TAKARA BIO.

| Proteins | Origins | Production (g/L) |
|------------------|-------------------------|------------------|
| Enzymes | | |
| α-amylase | <i>B. licheniformis</i> | 3.7 |
| Sphingomyelinase | <i>B. cereus</i> | 3.0 |
| Xylanase | <i>B. halodurans</i> | 0.2 |
| Antigens | | |
| Surface antigen | <i>E. rhusiopathiae</i> | 0.9 |
| Surface antigen | <i>T. pallidum</i> | 0.8 |
| Cytokines | | |
| EGF | human | 1.5 |
| IL-2 | human | 0.6 |
| NGF | mouse | 0.2 |
| IFN-γ | chicken | 0.5 |

Examples of Successful Production of Heterologous Proteins Using *Brevibacillus* System

Takara

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