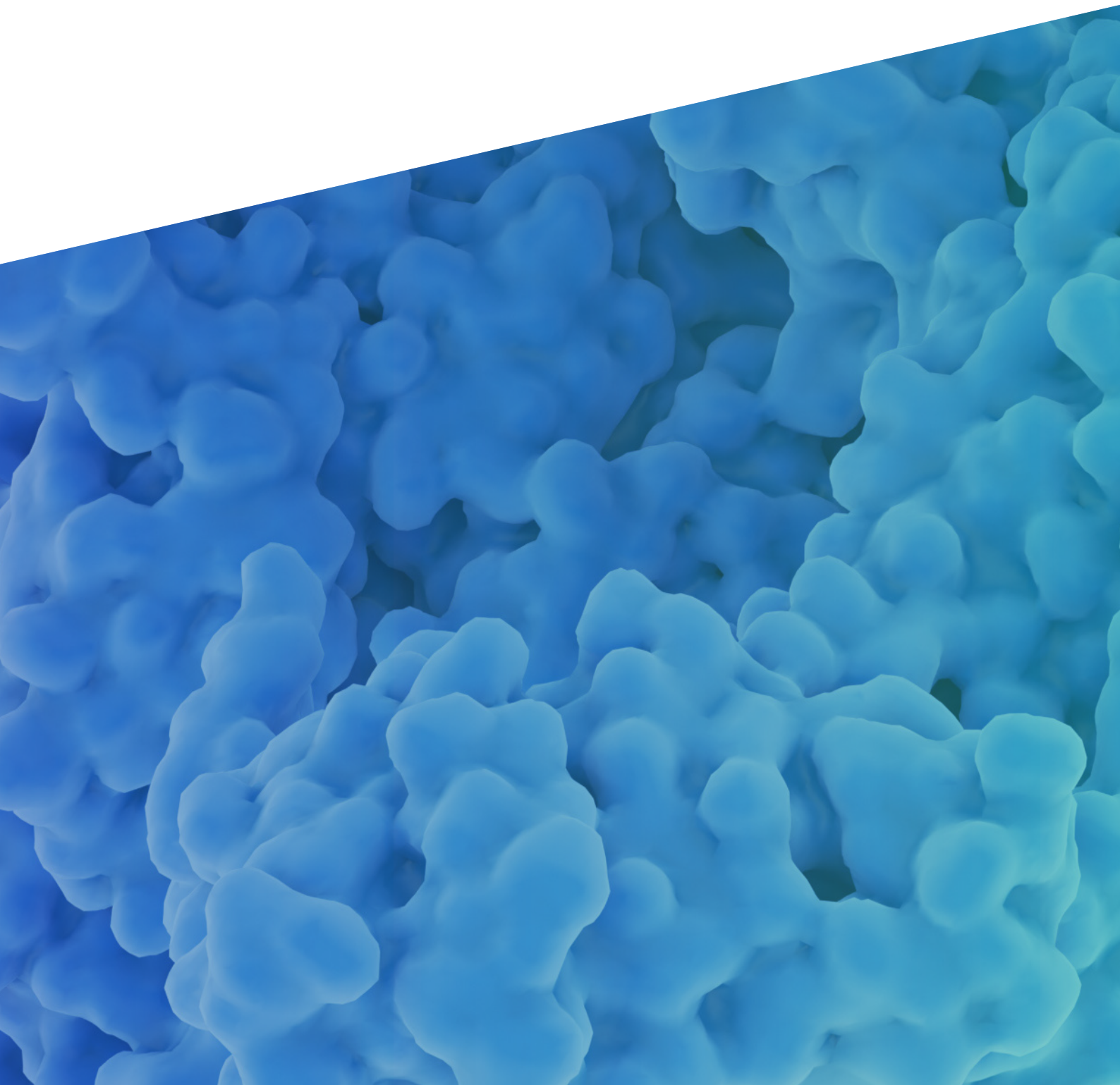
SEQENS

OUR SCIENCE FOR YOUR FUTURE

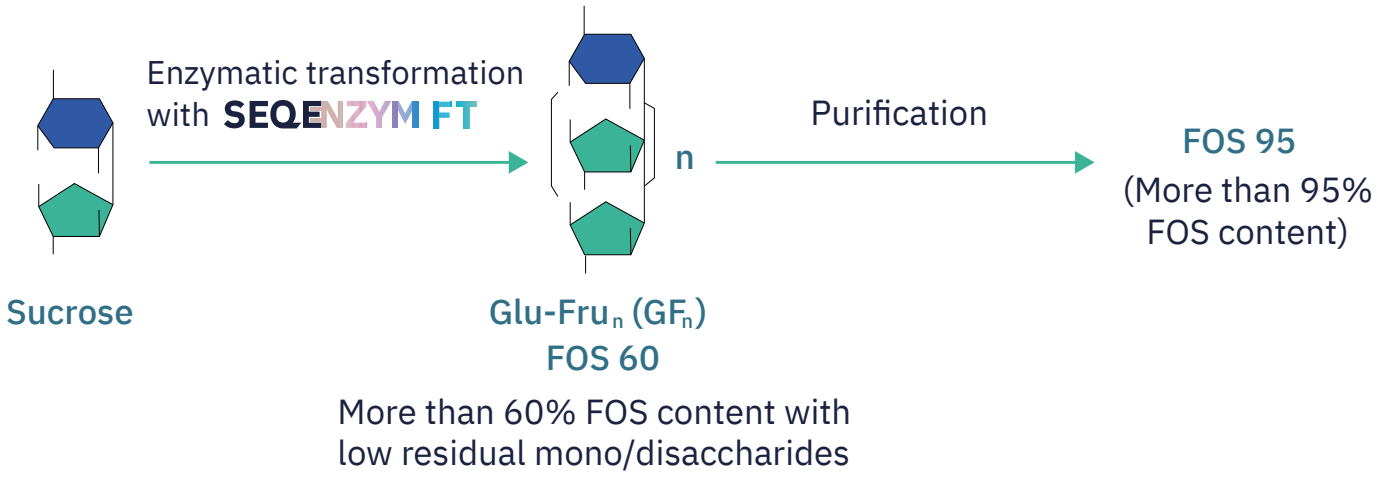
**Biotechnologies**

# SEQENZYM® FT

Convert sucrose into short-chain Fructo-Oligosaccharides (scFOS)
*(Patent Pending)*



This new « ready to use » enzyme displays a **fructosyl-transferase** activity to produce scFOS with high sucrose conversion




## Adjustable FOS 60 Profile

*fine-tune process conditions to reach desired content*

| | | GF2 max | GF3 max | GF4+GF5 max |
|---|---|---|---|---|
| Total FOS | % / tot sugar | 58 - 62 | 58 - 62 | 50 - 63 |
| GF2 | % / FOS tot | 68 | 37 | 10 - 42 |
| GF3 | % / FOS tot | 30 | 53 | 25 - 55 |
| GF4+GF5 | % / FOS tot | 2 | 10 | 16 - 50 |
| Sucrose | % / tot sugar | 15 | 8 | < 15 |
| Glucose | % / tot sugar | 25 | 30 | 25 - 45 |
| Fructose | % / tot sugar | < 0.5 | < 1 | < 3* |

** nearly two times lower than competition*

## Food & Feed Compatible Solution

- Food enzyme dossier submitted to EFSA, under review
- Received the self-GRAS status in the USA based on evaluation by independent expert's panelists.

## Benefits of SEQENZYM FT

- Independant from sugar source
- Highest yield > 60 % Total FOS
- Higher purification yields
- Lowest free Fructose < 1 %
- No color formation < 10 ICUMSA

## What are FOS ?

Short-chain FOS, or scFOS, represent soluble, pleasantly sweet prebiotic fibers that resist digestion and offer minimal calories. These dietary elements deliver functional benefits across diverse applications. Functioning as prebiotics, they support the flourishing of a wholesome gut microbiome. In the colon, beneficial bacteria ferment scFOS into short-chain fatty acids (SCFAs) having multiple health benefits, on immunity and on the metabolism. Additionally, SCFAs contribute to the preservation of gastrointestinal tract integrity, serving as the preferred energy source for colon cells.

## Read the latest independent publication about our enzyme

*Karkeszová, K.; Polakovič, M. Production of Fructooligosaccharides Using a Commercial Heterologously Expressed Aspergillus sp. Fructosyltransferase. Catalysts 2023, 13, 843.*

*Free enzyme samples available on demand for testing*

# About SEQENS

At SEQENS Biotechnologies, we offer biosolutions for every application, including high-value active molecules, microorganisms, specialty enzymes, and industrial biocatalysis. Our two cutting-edge research centers in France, Protéus and Alganelle, are dedicated to developing ingredients & bioproducts through proprietary projects and collaborations with expert partners.

Created in **1998** and within **SEQENS** since 2017

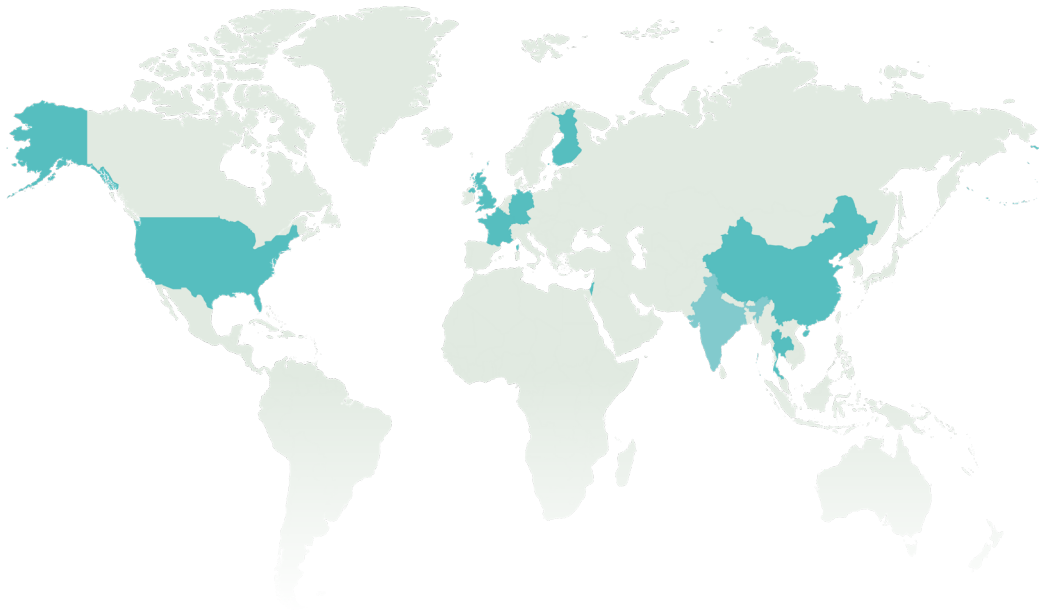
**20** Research scientists & experts

Development of tailored enzymes & biocatalytic processes

Fermentation scale-up from Lab to **300L bioreactors**

The only EU-based company offering both **directed evolution** services and **large reaction capabilities**, for fine chemicals & cosmetics ingredients

## SEQENS, an integrated global leader in pharmaceutical synthesis and specialty ingredients



**3,300** people

**9** R&D centers

**9** Countries

**300** scientists, experts and engineers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*Entité légale PCAS SAS

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