

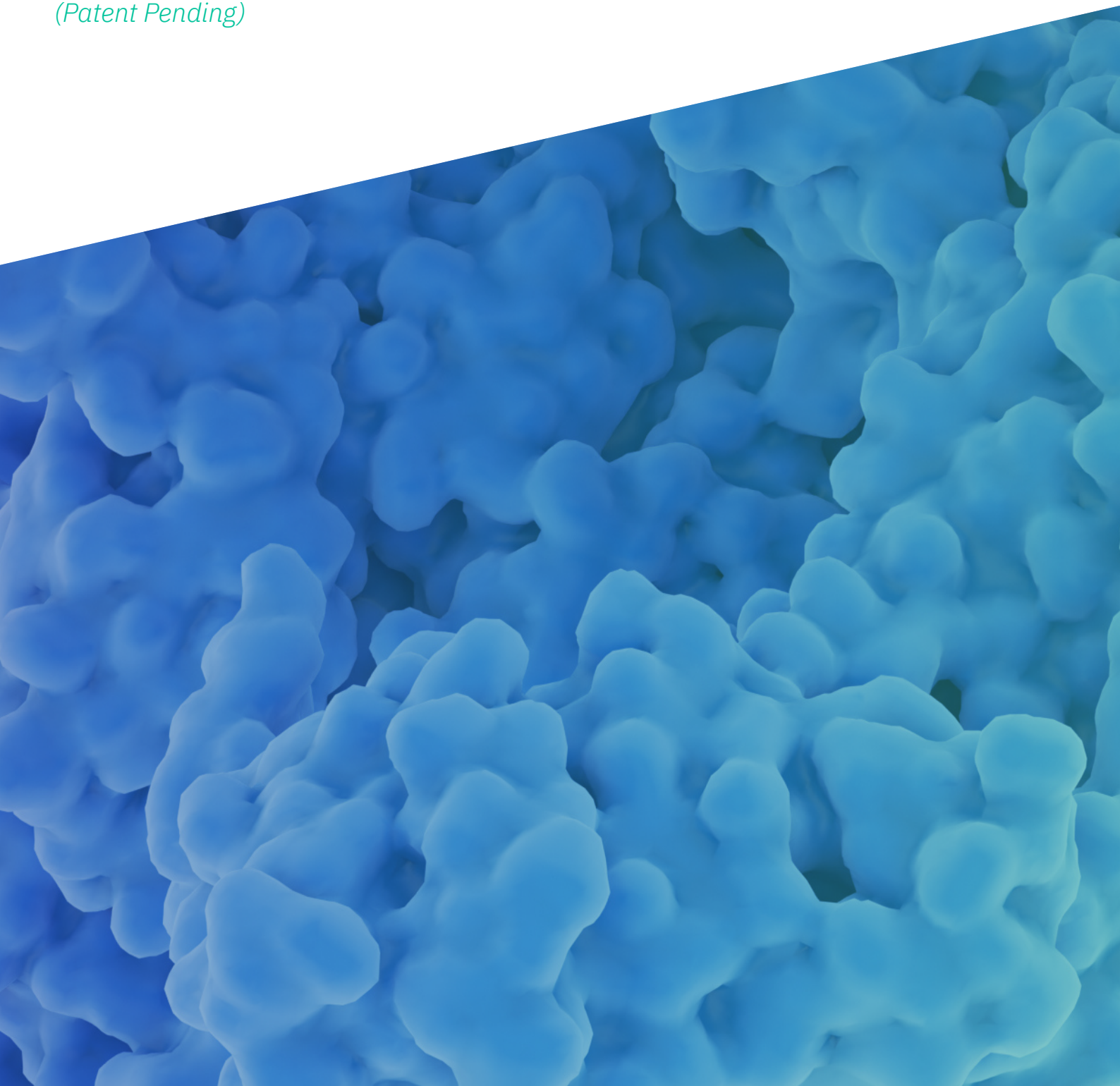
protéus

BY SEQENS

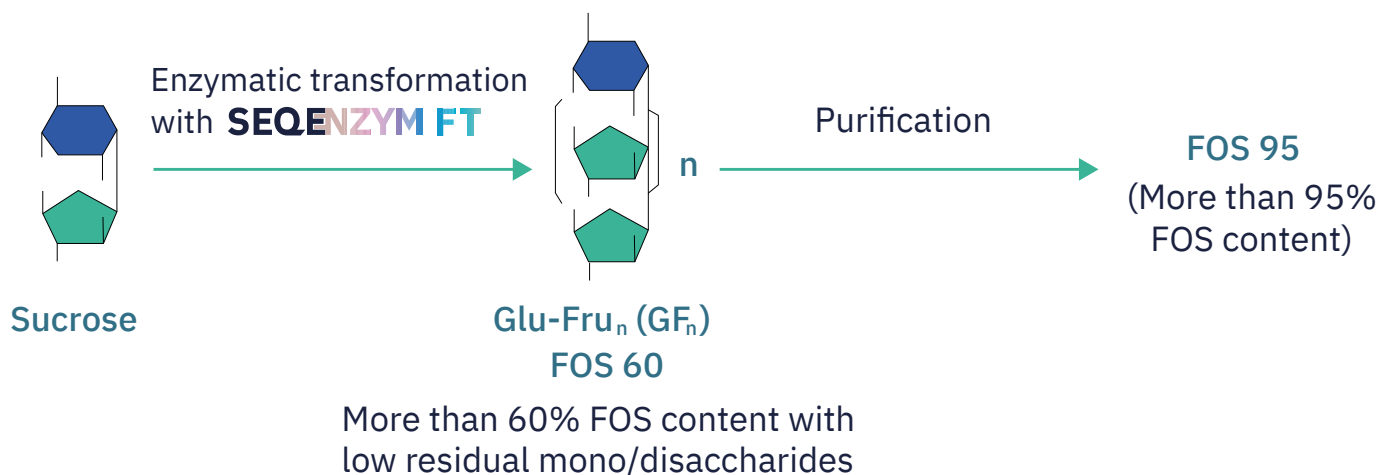
SEQENZYM[®] FT

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
- GRAS dossier in preparation according to *FDA Recommendations for Submission of Chemical and Technological Data for Food Additive Petitions and GRAS Notices for Enzyme Preparations*

Benefits of SEQENZYM FT



Independant from sugar source



Lowest free Fructose < 1 %



Highest yield > 60 % Total FOS



No color formation < 10 ICUMSA

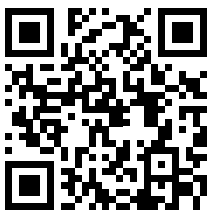


Higher purification yields

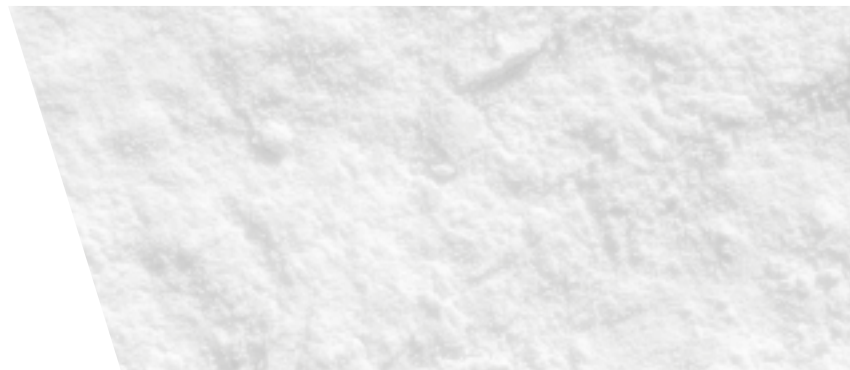
What are FOS ?

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.

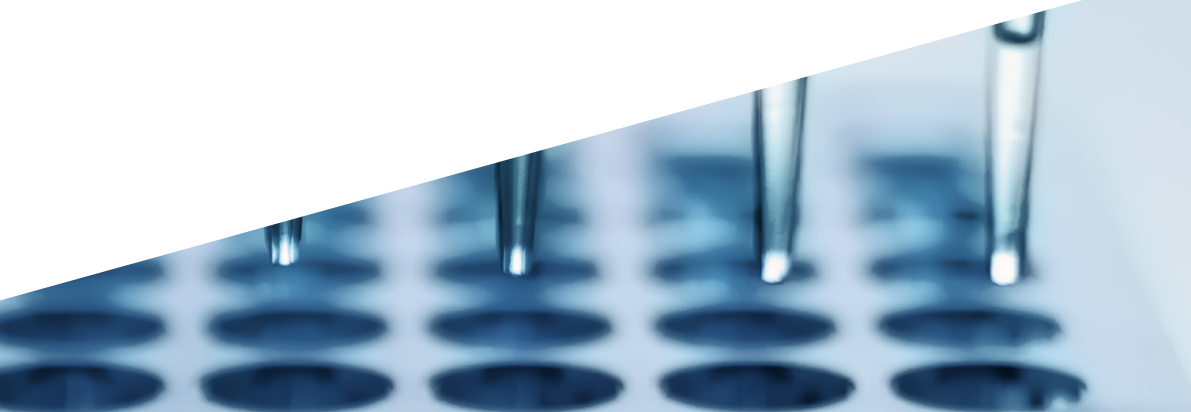
Read the latest independent publication about our enzyme



*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 Protéus by Seqens

Protéus, a wholly subsidiary of Seqens Group, is the French leader in protein engineering technologies and associated industrial biocatalytic processes :

- **5 000+** exclusive and diversified **microorganism collection** including micro-algae and thousands of bacteria and archaeobacteria extremophiles
- **1 500 fully sequenced strains** combined with data mining tools, offering a unique pool of million enzymes
- **650+ enzyme portfolio** for tailor-made kits
- **Patented protein evolution technologies** (EvoSight™ & L-Shuffling™) to optimize enzymes performances
- **In silico design** of smart libraries & molecular dynamic analysis
- A multidisciplinary skilled team dedicated to **custom bioprocess development and scale-up** for client's applications
- Seqens capabilities enabling in-house **implementation of large-scale biotransformation processes**



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



20 Research scientists & experts



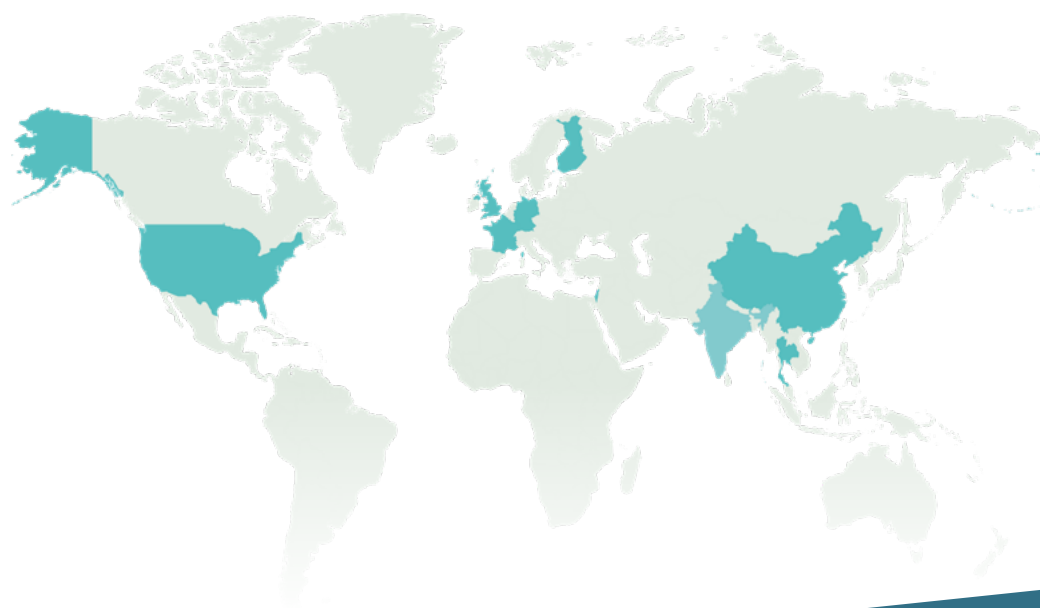
Development of tailored enzymes & biocatalytic processes



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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