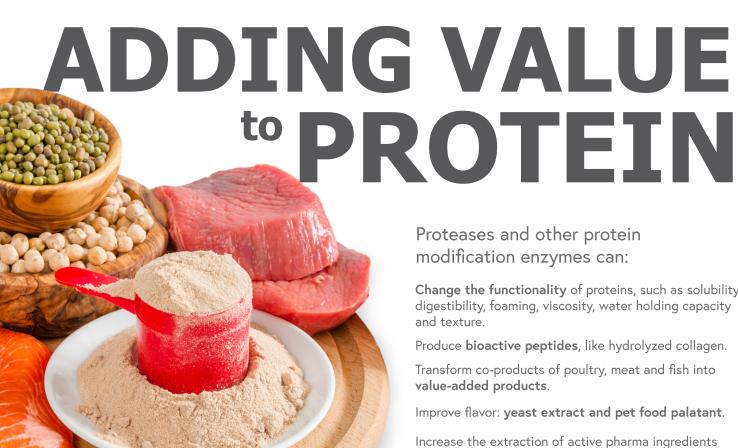


# Enzymes for protein processing

Prozyn has more than **30 years of experience** in the application of enzymes for different industries. We develop solutions according to the customer needs, offering the **widest portfolio of proteases** in the market.





Change the functionality of proteins, such as solubility, digestibility, foaming, viscosity, water holding capacity

Produce bioactive peptides, like hydrolyzed collagen.

Transform co-products of poultry, meat and fish into

Improve flavor: yeast extract and pet food palatant.

Increase the extraction of active pharma ingredients from animal tissues: chondroitin sulfate and heparin.

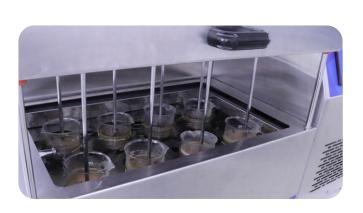
Higher yield in protein meal and lipid extraction.

Solutions for different hydrolysis profiles and substrates.

Increase free amino acids.

### **INNOVATION CAPABILITIES**

Prozyn has a state-of-the-art application lab with sophisticated equipment to measure DH, peptide distribution and flavor characteristics. We also have designed reactors that can hydrolyze proteins at different conditions of pH, temperature and substrates, to find the best protease to produce specific hydrolysates.







## **OUR SOLUTIONS**

Solutions	Applications
SOLUZYME™ AP Acid protease	Hydrolysis of proteins at acid conditions.
SOLUZYME™ NP Neutral protease	Yeast extract production. Hydrolysed collagen and palatants.
SOLUZYME™ AK Medium alkaline protease	Yeast extract production. Hydrolysed collagen and palatants.
SOLUZYME™ HT Neutral thermostable protease	Hydrolysis of proteins at neutral conditions and high temperatures in a short time.
SOLUZYME™ NK Endo-peptidase	Vegetable and animal protein modification at a wide pH range, acting from neutral to alkaline conditions.
SOLUZYME™ EE Endo-exopeptidase	Highest degree of hydrolysis (DH) to remove bitter taste of hydrolyzed proteins.
SOLUZYME™ HA High alkaline protease	Hydrolysis of proteins from animal tissues and yeast extraction production.
SOLUZYME™ PP Papain	Versatile protease that hydrolyzes a variety of protein substrates over a wide range of conditions.
SOLUZYME™ BM Bromelain	Vegetable protease with wide substrate affinity.
SOLUZYME™ PG Protein glutaminase	Improve protein solubility.
SOLUZYME™ TG Transglutaminase	Animal protein modification for restructured proteins.
SOLUZYME™ FH Specific proteases	Increase fish oil and meal extraction.
SOLUZYME™ BH Specific proteases	Chondroitin sulfate and heparin extraction from bovine coproducts.
SOLUZYME™ SH Specific proteases	Chondroitin sulfate and heparin extraction from swine coproducts.
SOLUZYME™ PL Specific proteases	Hydrolysis of visceras for palatant production.
SOLUZYME™ K Keratinase	Hydrolysis of chicken feathers and other keratin substrates to increase protein digestibility.
SOLUZYME™ EG Specific proteases	Hydrolysis of egg white that make it more fluid, reduce the coagulation of proteins and gives it a neutral flavor profile.
SOLUZYME™ EX Exopeptidase	Production of small peptides and free amino acids.
SOLUZYME™ FER Specific proteases	Production of small peptides and free amino acids to produce natural fertilizer from fish.
SOLUZYME™ CT Catalase	High-efficiency removal of hydrogen peroxide on the protein modification process.

For any other needs or challenges, feel free to ask us to develop a customized solution.



## Your challenges, our solutions

Prozyn has the capabilities to help our customers face the challenges of a very competitive marketplace.

- •The widest portfolio of enzymes in the market.
- •Team with technical background and industry expertise.
- Application labs that allow simulating customer processes in-house.
- State-of-the-art physical chemical and microbiology labs.

#### **CERTIFICATIONS**











#### ENZYMES SOLUTIONS THAT CREATE VALUE

Prozyn develops solutions that:

- Reduce raw material costs.
- Reduce process costs of water and energy.
- Improve the quality of products.
- Transform co-products into value-added products.























