



Enantis

Protein pro team



Contract research services overview

Enantis offers a **range of custom services** that can be adjusted to your specific needs. The type of molecule, its purpose, the scale of optimization or method used is up to your choice. Enantis is a **reliable service provider** with proven track record that works on a **confidential basis** and aims to become the best partner for your business

Our approach



Advanced computer analysis

We combine evolution- and energy-based methods to predict beneficial mutations in the molecule



Rational design

We identify only a handful of the most promising candidate molecules that we test - not hundreds or thousands



Advanced biophysical testing

We have an in-house capability to test your molecule and its new properties



Fee for service

We work on a fee for service basis where the tasks and payments are based on pre-agreed milestones

Our expertise



Enzyme engineering

We offer our cutting-edge enzyme engineering services that can help you mainly with:

- stability (thermodynamic and kinetic)
- activity
- specificity
- enantioselectivity



Protein engineering

We are a protein engineering company that generates its own hyperstable proteins. We can help you with following issues:

- stability (thermodynamic and kinetic)
- binding affinity
- receptor specificity

Other services

Synthetic pathway design

We are able to design and optimize synthetic pathways according to your needs. Get in touch to discuss your goal.

Why Enantis?

We have a unique skill set as well as other advantages...



Time saving

We can enhance any type of molecule for any properties in **around eight to ten weeks**



Efficient

After the **free initial evaluation step** of your project, we have 100% success rate



Cheaper

Up to **1/3 cheaper** compared to our competitors

Success stories

Our success stories are anonymized since we work on a confidential basis...

Animal feed industry

Improving stability and activity of mycotoxin-degrading enzymes

For our customer, we developed a series of mycotoxin-degrading enzymes with improved properties. The harsh conditions during the production called for heat stability and activity improvements:

- we managed to **increase the melting temperature by 30°C**
- the **activity was steadily improved** even at temperatures exceeding 60°C

The customer came back repeatedly to collaborate on more projects and we managed to optimise an array of enzymes for similar purposes.

Chemical industry

Optimization of enzymes involved in degradation of harmful substances

We managed to optimize enzymes for environment remediation after chemical contamination. The practical use of such enzymes was halted by their low activity, thus, we optimised their properties:

- **thermostability increased by 25°C**
- **increased activity and longevity** of enzyme at higher temperatures (longevity improved from 6 hours to more than 7 days)

Project finished by successful design and production of such enzymes.

Microbiology research

Improvement of metalloendopeptidase stability

In silico design of antimicrobial enzyme was carried out for a customer who works in microbiology. This enzyme was highly unstable at certain temperatures and Enantis helped to increase its potential:

- the **melting temperature was increased by 20°C**

The customer elected to carry out the molecule testing in their labs and the molecule design proved to be successful and beneficial for their use. There is a potential of future collaboration.

Pharma and medical

Optimization of therapeutic proteins for wound healing

We managed to optimize proteins for wound healing applications. The practical use of this protein was halted by its instability at 37°C. The protein longevity was optimized for its use in regenerative medicine:

- **50-times increased longevity** of protein at 37°C (from 9 hours to 30 days)
- **fully retained biological function** and higher activity

The project still continues and a range of similar proteins is being designed.

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