



nexelis

disciplined agility

assay development • specialty testing

> PROTEIN SCIENCES PLATFORM

Molecular Biology

- Gene synthesis
- DNA plasmid production
- Molecular cloning
- qPCR
- Mutagenesis

Protein Expression

- Protein engineering
- Comparative evaluation of constructs to provide the optimal product
- Small-scale construct expression conditions screening in various expression systems
- Early identification of clones expressing protein with needed key quality characteristics
- Large scale expression using selected candidate
- Generation, selection and banking of stable clones
- Different expression systems: mammalian cells (CHO, HEK293), baculovirus (Sf9, Tni), yeast (*Pichia*), *Escherichia coli*, cell free

Protein Purification

- Development of product-specific purification strategies to reach the desired purity and key parameters
- Multiple types of separation media
- Automated system for systematic resins and conditions screening
- In-process analysis of biophysical and chemical properties

Protein Characterization

- Customized approach to rapidly provide orthogonal evaluation of protein related key parameters
- Implementation of new assays best adapted to specific applications
- External collaborators to access complementary expertise
- Short- and long-term stability testing and stress tests

Our scientists, with over 20 years of experience in molecular biology, protein expression, protein purification and structural/physicochemical characterization will advance your project to match your exact needs from gene synthesis to fully characterized purified proteins using state-of-the-art instrumentation.

Vast expertise:

- Viral, bacterial proteins
- Integral membrane proteins
- Native proteins
- Complex/multimeric proteins
- Lipoproteins
- Antibodies
- Hetero-oligomer proteins
- Particle-forming proteins (e.g. VLPs)
- Enzymes
- Pseudoparticles