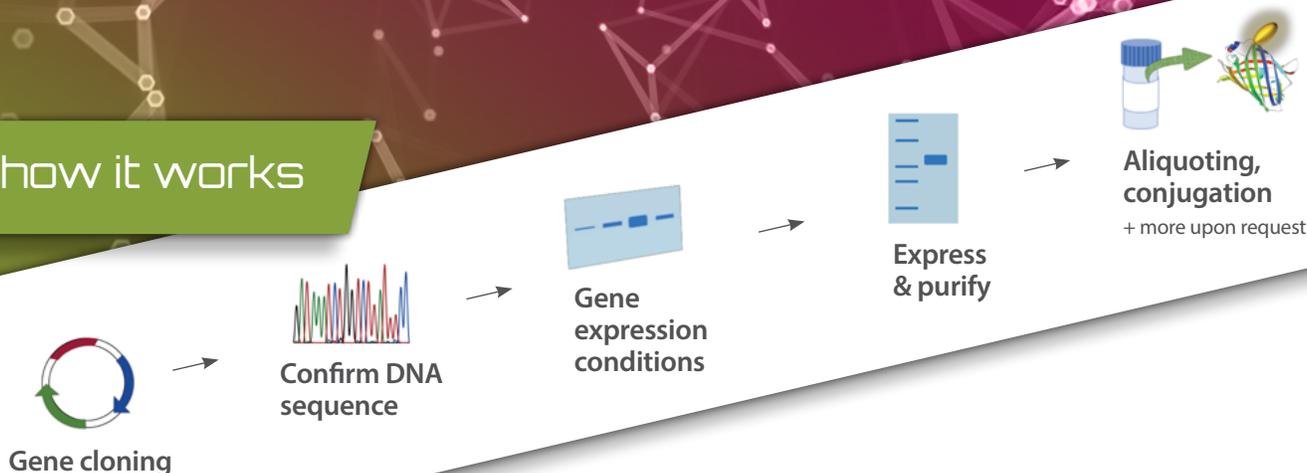


# Recombinant Proteins

Off-the-Shelf & Custom Service

## COMPREHENSIVE GENE 2 PROTEIN SERVICE

### how it works



### Can't find your protein-of-interest on the market?

We offer a comprehensive **custom recombinant protein** service:

- Gene cloning through protein purification
- Protein desalting, lyophilization, vialing
- Conjugation to tags, fluorophores, or other labels



#### Bacterial Expression System

- *E. coli* culture
- Fast, cost-effective production
- Easily scalable
- High purity (> 95%)
- 3-week turnaround time



#### Mammalian Expression System

- High density HEK293 suspension culture
- Best for producing native conformations & post translational modifications
- Easily scalable
- High purity (> 95%)
- 2-month turnaround time



Check out our diverse catalog of purified & overexpressed **off-the-shelf native & recombinant proteins**

# Epitope Mapping

Peptide Arrays & Service

## HIGH THROUGHPUT EPITOPE MAPPING

Identify the binding site of your antibody

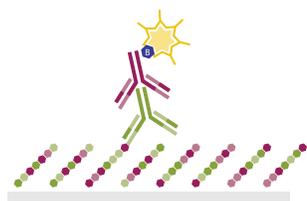
### how it works



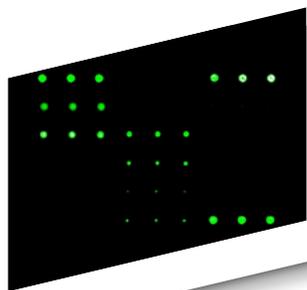
**Design of Overlapping Peptides & Peptide Synthesis**  
using high purity peptides



**Array Printing**  
Peptides are printed on a glass slide.



**Array Testing**  
*(RayBiotech or Do-It-Yourself)*  
Primary antibody or serum +  
Biotin-conjugated secondary antibody +  
Cy3-streptavidin



**Data Analysis**  
The specific binding of each epitope  
is evaluated.

### APPLICATIONS of epitope mapping

- Identify high antigenicity epitopes for antibody production & vaccine development
- Locate (auto)antigen epitopes of (auto)antibodies
- Define the best antibody clone against the protein-of-interest
- Perform epitope mutant analysis
- Map B cell epitopes

### Comprehensive Service Package

We can design and produce your peptide array, test your antibody (or serum) samples, and analyze the data for you.

### High Throughput Peptide Screening

Simultaneous analysis of hundreds to thousands of overlapping epitopes.

### Low Sample Consumption

Use as little as a few microliters ( $\mu$ l) of antibody

### High sensitivity

Biotin-streptavidin + fluorescent dye = most sensitive assay available to measure signal.

### Wide dynamic range of detection

Up to 4 orders of magnitude.