

# Custom Services



**MAXIMIZE  
YOUR RESULTS**

## Your time is valuable. We can help.

We are **PROTEIN DETECTION EXPERTS** and a **CONTRACT RESEARCH ORGANIZATION (CRO)** specializing in antibody arrays, protein arrays, immunoassays, and biomarker discovery. Our team of experienced R&D scientists and technical consultants can assist you with building every step of your project, from experimental design to assay development and validation.

### TESTING SERVICES

- Antibody Arrays
- Protein Arrays
- ELISA
- Auto-Western Service
- Ultrasensitive Biomarker Testing Service
- Epitope Mapping

### CUSTOM SERVICES

- Array printing
- Immunoassay development
- Flow cytometry
- Antibodies
- Aptamers
- Cell culture
- Recombinant proteins
- Biostatistics & bioinformatics



# custom services

We'll tailor a reagent or assay to your specifications.

## ARRAYS

- Semi-quantitative & quantitative
- Sandwich-based antibody arrays
- Label-based antibody arrays
- Protein arrays
- Array printing

## ASSAY DEVELOPMENT

- Custom ELISAs, EIAs, & SIMOAs
- Custom antibody, protein, & peptide arrays
- Phosphorylation & total protein targets
- Assay validation

## ANTIBODIES

- Mouse monoclonal antibodies
- Polyclonal antibodies from various host species
- Phospho-specific antibodies
- Antigen design & production available

## APTAMERS

- Oligonucleotide antibody mimetic
- Highly specific
- Produced without animals
- Easily scalable

## PROTEINS

- *E. coli* & HEK293 expression
- Gene cloning to protein purification
- Downstream processing (protein desalting, lyophilization, & tag conjugation)

## comprehensive service & discovery center

We have the expertise for every stage of your grant proposal, study, or clinical research.

- Cell culture, transfection & treatment
- Flow cytometry
- Capillary westerns
- Affinity purification
- Gene cloning
- Data analysis
- And more!

### Why choose RayBiotech?

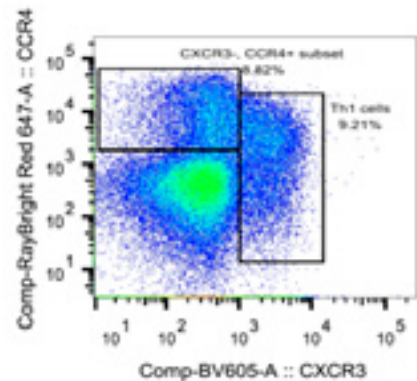
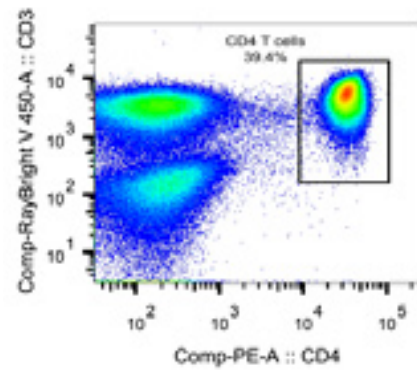
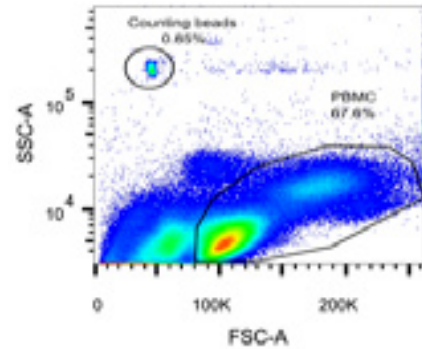
As a leading manufacturer of immunoassays, we are committed to delivering consistent and reliable data. Our highly responsive technical support team can assist you with all of your questions and concerns.

Your project is unique.  
So are our solutions.

## FLOW CYTOMETRY

- Free consultation
- Custom antibody conjugation available
- Long-term service contracts available
- Scatter plot report based on your gating preferences
- Flow cytometry data files made available to you for flexible analyses

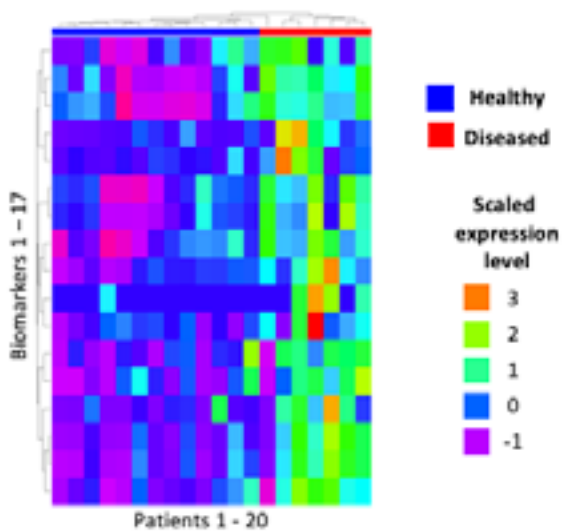
## Flow cytometry scatter plots of PBMCs



## BIostatistics & Bioinformatics

- Data from our arrays or yours
- Tailored packages available
- Data clean-up, differential expression analysis, cluster analysis, pathway analysis, & biomarker selection
- Inquire about other data types

## Hierarchical cluster & heatmap of healthy & diseased patients





# testing services

RELIABLE / TRANSPARENT / TAILORED SOLUTIONS

## Let RayBiotech be your second pair of hands.

Send your samples to our experienced service department for comprehensive testing with any of our assays or products. Full analysis reports provided with every service. Full data reports provided with every service, delivered right to your inbox.

### ARRAYS

- Over 300 off-the-shelf arrays
- Antibody, phosphorylation, protein, and glycobiology arrays
- Semi-quantitative & quantitative arrays
- Custom arrays

### ELISA & EIA

- Over 3,000 ELISA & EIA kits
- Phospho-specific & other PTM ELISAs
- Transcription factor activity assays

### ULTRASENSITIVE ASSAYS

Single molecule array (SIMOA™)  
for hard-to-detect proteins

- Femtogram level detection
- Pre-validated & custom assays

### Immuno-qPCR ELISA (IQELISA™)

- 10x - 100x more sensitive than ELISA
- Uses 1/10th the sample volume

### AUTO-WESTERN

RayBiotech's Auto-Western Service uses our state-of-the-art capillary immuno-blotting system.

- Low sample volume (5  $\mu$ L)
- High sensitivity (ng – pg)
- Your antibodies or ours
- Vast antibody catalog (> 2400 antibodies)

### EPITOPE MAPPING

- Custom peptide array
- Peptide design & synthesis, array printing, array testing, & data analysis

