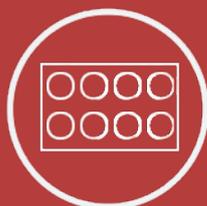


## Biotinylated Proteins

Bring pre-labeled biotinylated proteins directly to your bench



ELISA



FAC Sorting



Biopanning



SPR



Enrichment



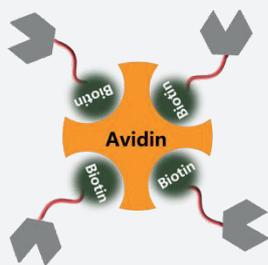
More

- High Quality Recombinant Proteins
- High Bioactivity & Detection Sensitivity
- Low Batch-to-Batch Variation

[www.biocat.com/biotinylated-proteins](http://www.biocat.com/biotinylated-proteins)

## Biotinylated Proteins

Biotin is commonly used as a protein tag to facilitate protein detection, purification, and immobilization.



The bond between biotin and its binding partner avidin (or streptavidin) is unique in the following ways:

- Strong ( $K_d = 10^{-15}$  M)
- Specific
- Multi-moiety
- Stable
- Minimal interference

The biotin-avidin (streptavidin) system is a versatile technology with the following applications.

## Applications

### ■ ELISA

Biotinylated proteins can be used in sandwich ELISAs for antibody detection with high specificity and sensitivity.

### ■ FACS

Biotinylated proteins can be used in conjunction with fluorophore-labeled avidin/streptavidin to detect or isolate cells expressing particular surface markers.

### ■ Biopanning

Biopanning is an affinity selection technique applied during phage display for antibody drug development. Biotinylated proteins can be used with SA-coated magnetic beads/surface in biopanning resulting in higher coating density and uniform antigen presentation.

### ■ Surface Plasmon Resonance (SPR)

SPR is a standard method used by pharmaceutical researchers to study protein binding kinetics. Biotinylated proteins such as FcRn can be used along with Biacore Sensor Chip SA for SPR analysis with low baseline drift and noise, and low activity loss during surface regeneration cycle.

### ■ Immuno-capture and Enrichment

Biotinylated proteins can be used to isolate antibodies from plasma or other biological fluids for subsequent analyses with high sensitivity, and the processed sample can be easily analyzed in quantitative mass spectrometry.

### ■ Inhibitor Screening Assays

Candidate inhibitory antibodies or small molecules can be screened by employing biotinylated proteins like the immune checkpoint proteins PD-1 and PD-L1 along with immobilized interaction partners in a functional ELISA format.