

## Custom Antibody Production Service FAQs

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### 1. What antibody services do you provide?

We offer recombinant antibody production, monoclonal antibody production, polyclonal antibody production, and large-scale antibody production from hybridoma.

### 2. Do you serve customers outside the USA/Canada?

Yes, we have been serving customers worldwide since 2002.

### 3. Do you provide guarantees?

Yes, we offer some of the best guarantees in the industry. Contact us for details or download our antibody package information from our website.

### 4. Which is better: polyclonal or monoclonal antibodies?

- **Polyclonal Antibodies:** Cost-effective, quick to produce, multiple specificities, but limited supply.
- **Monoclonal Antibodies:** High specificity (single epitope), unlimited production, but more time-consuming and expensive.

Your choice depends on your experimental needs.

### 5. Can you assist with an immunization strategy?

Yes, we offer guidance on immunization strategies and recommend discussing your project with us early for optimal outcomes.

### 6. What factors should I consider for peptide immunogen development?

- **Peptide Length:** Typically 12–22 amino acids; avoid peptides <8 amino acids unless necessary.
- **Carrier Protein:** KLH is preferred; other carriers like albumin are also available.
- **Conjugation Chemistry:** We recommend sulfhydryl cross-linkers for peptides without cysteine.

### 7. Will my custom antibody recognize native protein?

This depends on the design. Using multiple peptides for the same protein increases the likelihood. Affinity purification often resolves background issues.

## 8. How much protein is needed for antibody production?

We require 10 mg of protein (>90% purity) in two 5 mg sets. Provide SDS-PAGE data and ship as lyophilized powder (preferred) or neutral buffer (>1 mg/mL).

## 9. Do you offer peptide/antigen design assistance?

Yes, we provide free peptide design with antibody projects. Our team analyzes your protein sequence for the most immunogenic regions and offers recommendations.

## 10. Should I add sodium azide to antiserum?

Sodium azide prevents bacterial growth and is recommended unless the antiserum is used for cell culture or similar applications.

## 11. What species and animal numbers are appropriate for polyclonal antibody production?

Species and numbers depend on the antigen and required serum volume. Typically, two rabbits are used, but for specific needs, goats, chickens, or other animals may be recommended.

## 12. Should I generate antibodies against a full-length protein or peptide?

- **Full-Length Protein:** Multiple epitopes, higher cross-reactivity risk.
- **Peptide:** Highly specific antibodies but limited by the chosen peptide's exposure in the native protein.

## 13. Can I use multiple peptides as antigens?

Yes, but mixing peptides in the same immunization may create competition. Separate immunizations are recommended for distinct peptides.

## 14. Will I receive the peptide at the end of the project?

Yes, up to 5 mg of peptide will be provided.

## 15. What antigen purity is required?

- **Screening:**  $\geq 90\%$  pure.
- **Immunization:** Less pure antigens can be used. Contact us if you have purity concerns.

## 16. What buffer should my antigen be in?

We recommend PBS or non-toxic biological buffers (e.g., Tris) without detergents or urea. Notify us if using other buffers.

**17. Can you mass-produce and purify antibodies?**

Yes, we offer large-scale production and purification using Protein G or Protein A affinity columns.

**18. How will serum be shipped?**

Serum is shipped on ice packs. If sodium azide is added, antibodies can remain stable at room temperature for up to a week.

**19. How is my antibody shipped?**

Custom antibodies are typically shipped as lyophilized powder.

**20. How can I ensure reproducible Western blot results?**

Avoid reusing diluted antibodies. Ensure proper antibody concentration and confirm blotting procedures.

**21. Why do I see unexpected bands in my Western blot?**

This may indicate cleaved fragments, aggregated proteins, or homologous protein recognition. Affinity purification and proper controls can help.

**22. Why do I see no bands in my Western blot?**

Possible reasons include unexposed epitopes, protein conformational issues, or lack of target protein in the sample.

**23. How do I interpret my ELISA results?**

ELISA titers are reported as reciprocal dilutions. A titer of 60,000 means the antibody detects the antigen at a 1:60,000 dilution.