
POLYCLONAL ANTIBODY PRODUCTION SERVICES

Abbotec offers custom polyclonal antibody production services to the scientific community to accelerate a project From Biology to Discovery™. When the antibody for a chosen antigen is not already available off the shelf, it is time to develop a custom project. The experienced staff of Abbotec processes a custom project with the same mindset and tools that it develops antibody products for the Abbotec catalog: we want an antibody that specifically detects the antigen in the chosen application.

Polyclonal Antibody Production Packages

Abbotec has simplified the ordering process by offering 3 packages combining the most common customer requests:

Protein-specific Ab Combo: With 3 mg of protein as antigen, 100-200 mg of purified antibody is generated in rabbits against multiple epitopes in 3 months.

Peptide-specific Ab Combo: A peptide encompassing a short region of the target protein is used as antigen to generate in rabbits 100-200 mg of purified antibody in 4 months.

Phospho-specific Ab Combo: For monitoring target activation by phosphorylation, a phosphopeptide is used as antigen to generate in rabbits 5-10 mg of affinity-purified antibody in 4 months.

Abbotec offers complimentary peptide design services to ensure the success of the project.

Get a Quotation

Since prices vary upon project customization, we recommend submitting a quotation using the Quote Form available online for obtaining an accurate price. All requests are processed within 48 hrs.

Guarantees

Abbotec guarantees competitive pricing and delivery time for all routine options. We are proud of offering "Made in USA" quality label for these services by using our USDA-registered animal facility.

Every antibody project is supplied with a Peptide Design and Project reports, when applicable. Abbotec guarantees that the antibody generated using an antigen synthesized by Abbotec will recognize the antigen in ELISA.

Although most projects can be completed within 3-4 months, actual processing time is dependent on the peptide synthesis and animal immunization processes. Please contact the Technical Service Dept for updated timelines. Estimated delivery times are stated on all quotations.

Browse the following pages to find a description of the packages and technical protocols:

- 1. Protein-specific Antibody Combo**
- 2. Peptide-specific Antibody Combo**
- 3. Phospho-specific Antibody Combo**
- 4. Immunization Protocol**

1. Protein-specific Antibody Combo (Cat. No. 100100)

Protocol	Description	Time	Price
Immunization and Antisera Production Cat. No. 100120 Additional bleed collection Cat. No. 100125	Two rabbits are immunized with protein 90-day immunization protocol Pre-bleed (5 ml) and four bleeds (25 ml) from each rabbit Optional: Extended immunization and bleed collection (25 ml) from each rabbit	12-13 weeks 2 weeks	\$600.00 \$100.00
Serum Titration Cat. No. 100130	Serum is tested by ELISA before bleeding. Final bleed is collected if titer > 1:8,000	1 day	\$100.00
Antibody Purification using: Protein-A Affinity Cat. No. 100150 Ammonium Sulfate Precipitation Cat. No. 100140 Antigen Affinity Cat. No. 100160	Rabbit IgG are purified from antiserum using Protein-A affinity chromatography with yield up to 100 mg from each rabbit Optional: Ig fraction is purified from antiserum using saturated ammonium sulfate with yield up to 500 mg Antigen-specific IgG are purified from antiserum using antigen affinity chromatography with yield up to 10 mg	1 week	\$300.00 \$200.00 \$500.00
Protein-Specific Ab Combo	Includes Cat. No. 100120, 100130, 100150	13-14 weeks	\$1,000.00

2. Peptide-specific Antibody Combo (Cat. No. 100200)

Protocol	Description	Time	Price
Peptide Synthesis Cat. No. 100210	Custom peptide synthesis up to 20 residue (20 mg) and HPLC purification (purity >70%)	2-3 weeks	\$300.00
Cat. No. 100220	Optional: Custom peptide synthesis up to 20 residue (20 mg) and HPLC purification (purity >90%)		\$500.00
Peptide-Carrier Bioconjugation Cat. No. 100110	Peptide conjugation to KLH and BSA carrier proteins for immunization and titration	1 week	\$200.00
Immunization and Antisera Production Cat. No. 100120	Two rabbits are immunized with conjugated peptide 90-day immunization protocol Pre-bleed (5 ml) and four bleeds (25 ml) from each rabbit	12-13 weeks	\$600.00
Additional bleed collection Cat. No. 100125	Optional: Extended immunization and bleed collection (25 ml) from each rabbit	2 weeks	\$100.00
Serum Titration Cat. No. 100130	Serum is tested by ELISA before bleeding. Final bleed is collected if titer > 1:8,000	1 day	\$100.00
Antibody Purification using: Protein-A Affinity Cat. No. 100150	Rabbit IgG are purified from antiserum using Protein-A affinity chromatography with yield up to 100 mg from each rabbit	1 week	\$300.00
Ammonium Sulfate Precipitation Cat. No. 100140	Optional: Ig fraction is purified from antiserum using saturated ammonium sulfate with yield up to 500 mg		\$200.00
Antigen Affinity Cat. No. 100160	Antigen-specific IgG are purified from antiserum using antigen affinity chromatography with yield up to 10 mg		\$500.00
Peptide-Specific Ab Combo	Includes Cat. No. 100210, 100110, 100120, 100130, 100150	16-18 weeks	\$1,500.00

3. Phospho-specific Antibody Combo (Cat. No. 100300)

Protocol	Description	Time	Price
Peptide Synthesis Cat. No. 100310	Custom phosphopeptide synthesis up to 15 residue (20 mg) and HPLC purification (purity >90%)	2-3 weeks	\$800.00
Cat. No. 100210	Custom peptide synthesis up to 15 residue (20 mg) and HPLC purification (purity >70%)		\$300.00
Peptide-Carrier Bioconjugation Cat. No. 100110	Phosphopeptide conjugation to KLH and BSA carrier proteins for immunization and titration	1 week	\$200.00
Immunization and Antisera Production Cat. No. 100120	Two rabbits are immunized with conjugated phosphopeptide 90-day immunization protocol Pre-bleed (5 ml) and four bleed (25 ml) from each rabbit Optional: Extended immunization and bleed collection (25 ml) from each rabbit	12-13 weeks	\$600.00
Additional bleed collection Cat. No. 100125	Extended immunization and bleed collection (25 ml) from each rabbit	2 weeks	\$100.00
Serum Titration Cat. No. 100130	Serum is tested by ELISA before bleeding. Final bleed is collected if titer > 1:8,000	1 day	\$100.00
Antibody Purification using: 2-Step Phosphopeptide Affinity Cat. No. 100320	Antigen-specific IgG are purified from antiserum using antigen affinity chromatography with yield up to 10 mg	1 week	\$1,000.00
Phospho-Specific Ab Combo	Includes Cat. No. 100210, 100310, 100110, 100120, 100130, 100320	16-18 weeks	\$3,000.00

4. Immunization Protocol

Animal	New Zealand or Japanese White Rabbit
Adjuvant	Complete Freund's Adjuvant (CFA) is used for the first injection followed by Incomplete Freund's Adjuvant (IFA) for subsequent injections.
Immunogen	Peptide conjugated to KLH or protein (100-200 µg/injection)
Injection Procedure	Immunogen is diluted in 0.5 ml sterile saline solution and mixed with 0.5 ml appropriate adjuvant to form an emulsion that is injected subcutaneously in the shoulder region of the animal and intramuscularly in the large muscle of the rear leg.
Blood Collection	Blood is collected from the central ear artery with a 19-gauge needle and allowed to clot and retract at 37°C overnight. Clotted blood is then refrigerated for 24 h before serum is decanted and clarified by centrifugation at 2,500 rpm for 20 min.
Immunization	Day 1: Collect pre-bleed (5 ml) Immunization No.1 with 200 µg immunogen in CFA Day 21: Immunization No.2 with 100 µg immunogen in IFA Day 42: Immunization No.3 with 100 µg immunogen in IFA Day 49: Production Bleed No.1 (25 ml) The serum is titered by direct ELISA using the antigen immobilized to the wells. If the titer > 1:8,000, protocol moves on to Day 63, otherwise 2-week cycles of immunization, bleed collection and titration are extended until the titer is correct. Day 63: Production Bleed No.2 (25 ml) Day 70: Immunization No.4 with 100 µg immunogen in IFA Day 77: Production Bleed No.3 (25 ml) for IgG purification Day 91: Production Bleed No.4 (25 ml) Additional bleeds (25 ml) can be collected before final bleed if requested at project initiation (charge applied).