

ABBOMAX, INC

Custom Services

Polyclonal antibody production

Monoclonal antibody production

Phosphospecific antibody production

Antibody purification and labeling

Custom assay development

Recombinant protein expression

Peptide synthesis and conjugation

Custom antibody screening & mapping

Kinetic data

Custom Synthesis Services

Custom Liposome Preparation

Order information:

Order may be place by phone, fax, email or website.
Custom service is available 8:00AM to 4:00PM (Pacific Time), Monday-Friday.

AbboMax, Inc
2528 Qume Drive, Suite 8
San Jose, California, 95131. USA
Tel: 408-573-1898
Fax: 408-573-1858
Email: info@abbomax.com
Website: www.abbomax.com



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Custom Antibody screening & Mapping

80001

Kinetic Data

80002

Shipping:

All shipping and handling charges are prepaid by AbboMax and added to the invoice along with the shipment. If you would like to use your own carrier, please supply the account number when the order is placed. Orders are taken before 12:00PM (Pacific Time) can be shipped same day for the next day delivery domestically. All international orders will be shipped international priority using FedEx.

Product Warranty:

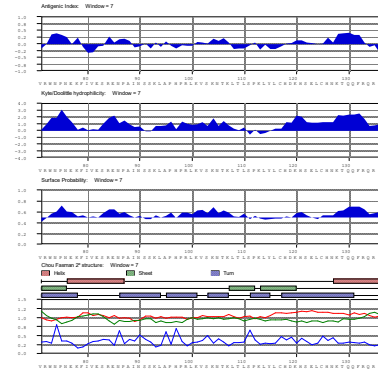
AbboMax Inc. warrants its services and products to original purchaser against defects in material and workmanship under normal use and application for a period of one year from date of purchase. AbboMax sole obligation under this warranty shall be to replace defective products that do not perform to our stated specifications. In no case shall AbboMax be liable for incidental or consequential damages. This warranty applies only to products in the original container that have been handled and stored in accordance with AbboMax recommendations. This warranty is in lieu of all other warranties, express or implied, including warranties of merchantability and fitness for a particular purpose.

Custom Antibody Services

Ab^{Max} polyclonal peptide-antibody package (Cat# 60001)

AbboMax provides regular polyclonal antibody package, the host can be any of the following animals at your choice – rabbits, chicken, mice and other animals. This package includes the following items

- ❖ Consultation of epitope selection in terms of antigenicity index, hydrophilicity and secondary structure
- ❖ 10-19 mg of peptide (80% checked by HPLC, up to 15 mer); BSA/KLH conjugation
- ❖ 2 rabbits (or other animals) with AbboMax immunization protocol
- ❖ Pre-immune serum (2-5 ml/rabbit); 4 s.c. immunizations; 2 bleeds with total 100 ml of serum
- ❖ ELISA titration for all bleeds, Western Blot (Optional); Dot Blot (Optional)



Data will be provided with the project:

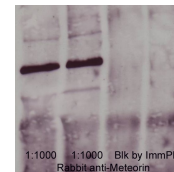
- ❖ Peptide: HPLC and Mass Spec
- ❖ Conjugation datasheet
- ❖ ELISA titration for all serum samples

Ab^{Max} polyclonal protein-antibody Package (Cat# 60002)

***Customers will provide immunogen(s) for immunization**

The package includes the following items:

- ❖ 2 rabbits with AbboMax immunization protocol
- ❖ Pre-immune serum (2-5 ml/rabbit); Antiserum 100 ml
- ❖ ELISA titration for all bleeds
- ❖ Western blot (Optional); Dot blot (Optional)



Ab^{Max} monoclonal antibody package (Cat# 60003)

Deliver in 3 months; Confidentiality is assured by AbboMax, Inc.

The package includes the following items:

- ❖ 5 mice with AbboMax standard immunization protocol,
- ❖ Phase 1—Pre-immune serum and antiserum (1 ml @ 1:100 dilution) with ELISA titration.
- ❖ Phase 2—Cell fusion and parental clone screening
- ❖ Phase 3—Subcloning and cryogenic vialing
- ❖ Phase 4—Large-scale monoclonal antibody production for a selected monoclonal
- ❖ Phase 5 (Optional)—Protein A purification according to the monoclonal isotype

Data will be provided with the project:

- ❖ Peptide: HPLC and Mass Spec if peptide is required
- ❖ KLH/BSA Conjugation datasheet
- ❖ ELISA titration for antisera, ELISA screening for all the clones
- ❖ Isotyping for the monoclonal

Ab^{Max} peptide carrier protein conjugation (Cat# 60004)

The peptide sequence information should be available for protein chemistry determination.

Data will be provided with the project:

- ❖ KLH/BSA/GGG/THY/PPD (a selected carrier protein) conjugation datasheet
- ❖ Conjugation efficiency determination (optional)—the molar ratio of peptide/carrier protein, SDS-PAGE verification

Ab^{Max} polyclonal phosphospecific/paired antibody package (Cat# 60008)

- | | |
|--|--|
| <ul style="list-style-type: none"> ❖ Consultation of phosphospecific site prediction and epitope selection ❖ 10-20 mg of phosphospecific and non-phospho peptides (80% checked by HPLC, up to 15 mer) ❖ BSA/KLH conjugation ❖ 2 rabbits with AbboMax immunization protocol for site-modification antigen | <ul style="list-style-type: none"> ❖ Pre-immune serum (2-5 ml/rabbit); 4 s.c. immunizations; 2 bleeds with total 100 ml of serum ❖ ELISA analysis for all bleeds and antibodies ❖ Affinity purification for phosphospecific and paired antibody production ❖ Dot blot to confirm the purified antibodies |
|--|--|



Ab^{Max} monoclonal phosphospecific/paired antibody package (Cat# 60009)

Deliver in 3.5 months; Confidentiality is assured by AbboMax, Inc.

Phase 1—Project initiation, mice immunization and titration

- ❖ Consultation of epitope selection and modification
- ❖ Phosphospecific peptide and non-phosphospecific peptide synthesis, purification, conjugation
- ❖ 5 mice with AbboMax standard immunization protocol
- ❖ Pre-immune serum and antiserum (1 ml @ 1:100 dilution) with ELISA titration

Phase 2—Fusion and parental clone screening

- ❖ Three population of parental clones will be selected according to ELISA
- ❖ Phosphospecific clones will be guaranteed among these three population clones

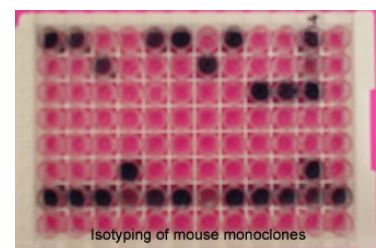
Phase 3—Subcloning

- ❖ Limit dilution on parental clones confirmed by customer's selection
- ❖ Isotyping for all the subclones

Phase 4—Large-scale antibody production for a specific monoclonal

- ❖ 50 ml ascites, ELISA confirmation, protein concentration and isotyping

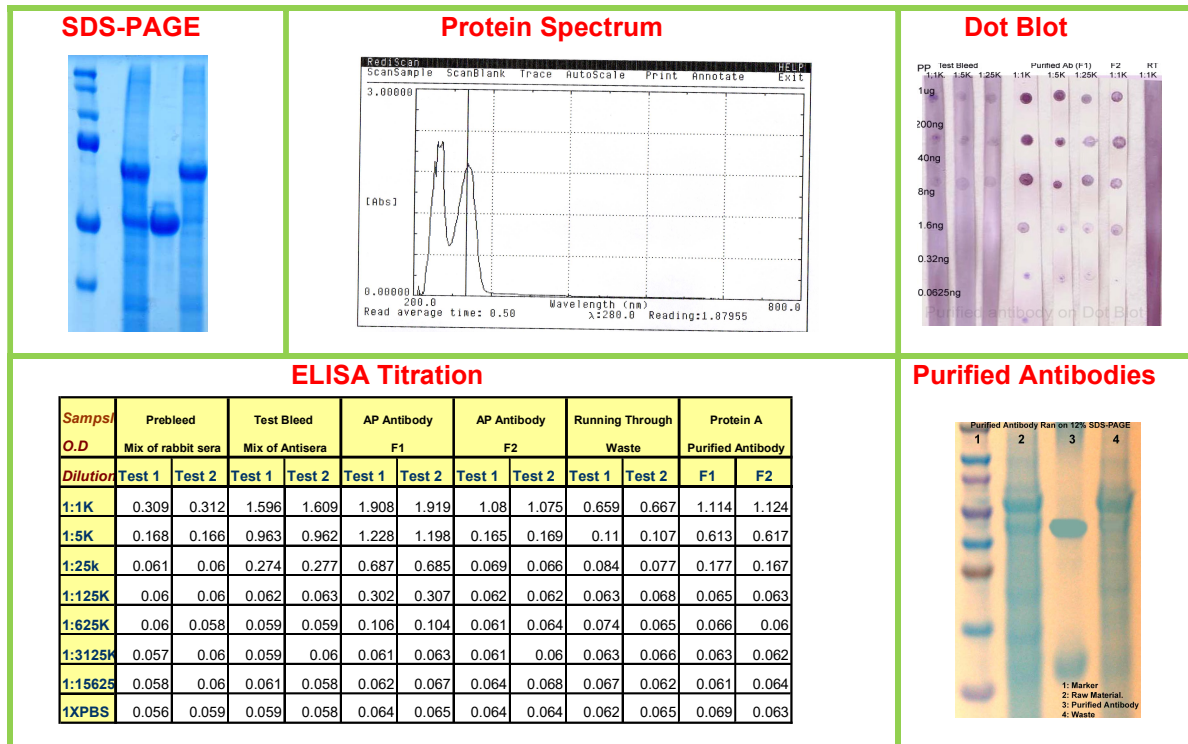
Phase 5 (Optional)—Protein A purification according to the monoclonal isotype



Ab^{Max} antibody affinity purification (Cat# 60005)

We provide the following purification according to customer requirements

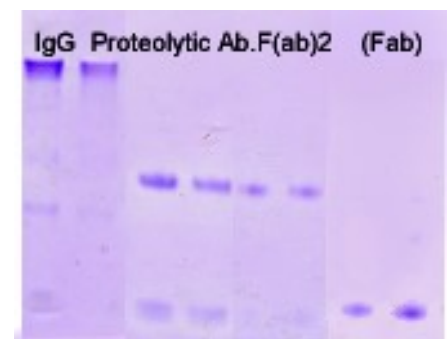
- ❖ Peptide epitope affinity purification
- ❖ Protein A/G affinity purification
- ❖ MAP system affinity purification
- ❖ All the purified antibody will be verified by antigen (protein/peptide) specific ELISA
- ❖ Antibody enrichment and recovery efficiency



Ab^{Max} Antibody Fab fragmentation (Cat# 60011ab1) Ab^{Max} Antibody F(ab)₂ fragmentation (Cat# 60012ab2)

To void antigen capping and internalization, antibody fragmentation is usually employed. In the antibody proteolytic fragmentation service, we provide the following items:

- ❖ The outline of antibody fragmentation process
- ❖ Antibody concentration and purity
- ❖ Results confirmed on electrophoresis.



Ab^{Max} Large-scale antibody production in vivo (Cat# 60013)

Ab^{Max} Large-scale antibody production in vitro (Cat# 60014)

Monoclonal antibodies can be produced in vitro or in vivo. AbboMax provides small or large scaled antibody production at your request.

- ❖ Cell line maintenance and expanding
- ❖ Antibody collection and treatment
- ❖ Protein concentration and ELISA validation.

Custom Assay Development Service

Asy^{Max} Immunoassay development (Cat# 60021)

Asy^{Max} Bioassay development (Cat# 60022)

Asy^{Max} Kinase activity assay development (Cat# 60023)

The scientists with AbboMax have been involving in immunology and cell biology research and product development for more than 15 years. With the state-of-art technology, we can help you to co-develop immunoassays, bioassays related to immunology, kinase activity assay with Phosphorylated protein measurement for your specific needs.

- ❖ Consultation of assay format selection
- ❖ Co-develop assays and finalize the parameters.
- ❖ Protocol writing, material and assay transferring.

Custom Recombinant Protein Service

Rec^{MAX} Molecular cloning and screening 60031

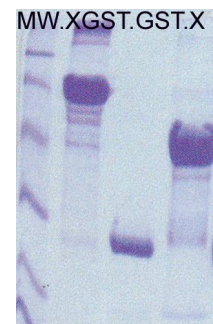
Rec^{MAX} Transfection and cell line selection 60032

Rec^{MAX} Recombinant protein expression & purification 60033

Rec^{MAX} Large-scale protein purification 60034

Molecular cloning and protein over-expression is an effective tool in preparing protein-antigens when the information of a cloned gene is available. The other advantage of using the recombinant protein is to recognize an effective affinity epitope involved in drug discovery. Dedicated scientists at AbboMax are willing to assist you to achieve your goal.

- ❖ Primer design and expression system selection
- ❖ Molecular cloning and cell line selection
- ❖ Mini-prep of selected clones
- ❖ Large-scale protein over-expression
- ❖ Protein purity and concentration checking, SDS-PAGE confirmation
- ❖ Western blot (optional)



Custom Peptide Synthesis (Cat#70001)

Peptide synthesis—AbboMax offers high quality, fast-turn-around custom peptide synthesis:

- ❖ Fmoc solid phase peptide synthesis, purified by reversed-phase HPLC
- ❖ Overnight synthesis of 10 mer or less high-quality crude peptides
- ❖ Fastest turn-around-time (TAT) in the industry
- ❖ Friendly and professional customer support
- ❖ D-amino acid synthesis, MAP synthesis
- ❖ Cyclization—disulfide bond 1, 2, and 3; amide cyclization
- ❖ Phosphorylation, methylation, acetylating
- ❖ Peptide fluorescence/dye labeling: biotin
- ❖ FITC/5-FAM, MCA, EDANS/DABCYL.

Free consultation services—We also offer free consultation services of epitope selection and phosphosphorylated Serine/Threonine, Tyrosin prediction.

Custom Antibody Screening & Mapping Services (Cat#80001)

HIGHLIGHTS

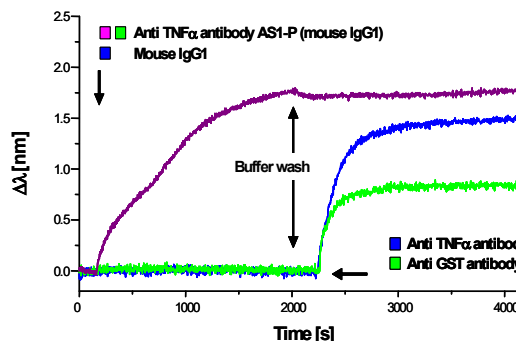
- Simple step – simply add the interested antibody sample into the loading well of pre-coated chips
- Fast – within 2 minutes, the curve of addition different antibodies appear indicating antibody pairs.
- Sensitive – detect antibodies in T. C super or ascites samples at **0.1-1 µg/100 µl**.
- Specific – assay does not cross-react with any other non-specific proteins
- Reliable – results are similar to standard ELISA-based assays
- Convenient—You only need to add samples onto the chip-wells.

Mapping antibody pairs may be a tedious labor work when quantitative sandwich ELISA is needed. In addition to our Services and Products listed above, AbboMax has the capability to support you directly with label-free analyses* of your proteins.

Antibody screening and epitope mapping:

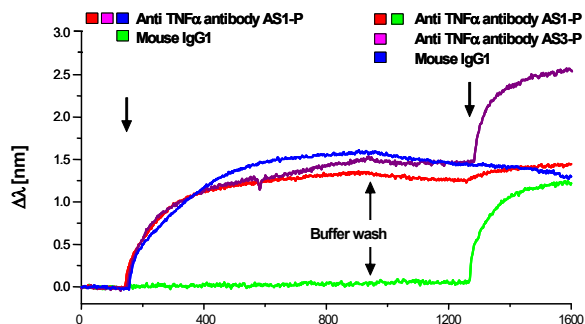
Screening : Anti TNF α antibody binding to TNF α

Ligands Binding is specific
 ■ human TNF α
 ■ glutathione S-transferase (GST)



Anti TNF α antibody binding to TNF α

Ligand: human TNF α Two monoclonal antibodies AS1-P & AS3-P bind to different epitopes

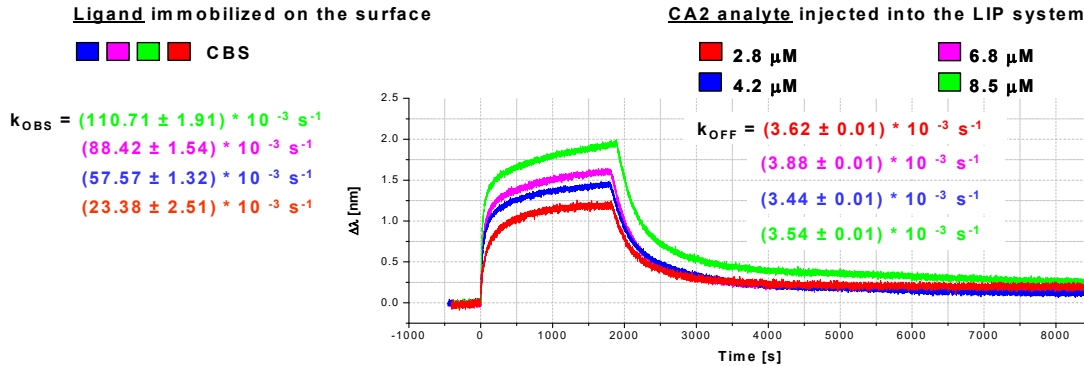


e your
we will

* using LamdaGen Corporation's **LightPath System**™ (www.lamdgen.com)

Kinetic Data Services (Cat# 80002)

Looking for kinetic data? We can provide k_{ONS} , k_{OFFS} and k_{DS} as per the following:



From k_{OBS} , k_{OFF} and the concentration of the analyte, C , we compute k_{ON} and K_D values:

$$k_{ON} = \frac{k_{OBS} - k_{OFF}}{C}$$

$$K_D = \frac{k_{OFF}}{k_{ON}}$$

Kinetic parameters determined from > 50 sensorgrams from > 10 sensors acquired on 4 different and independent machines yield average values with standard deviations of:

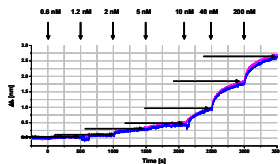
$$k_{OFF} = (3.63 \pm 0.3) * 10^{-3} s^{-1}$$

$$k_{ON} = (11.02 \pm 3.1) * 10^{-3} s^{-1} \mu M^{-1}$$

$$K_D = (0.33 \pm 0.11) \mu M$$

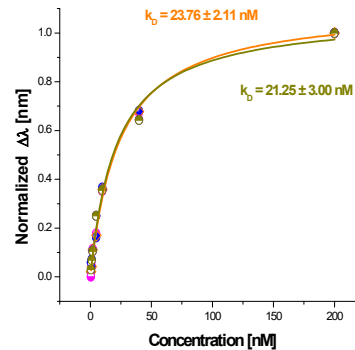
Quantitation is also possible as provided in the following example:

Quantitation : streptavidin / anti-streptavidin
Ligand : streptavidin
Assay : increasing amount of anti-streptavidin from whole serum (exact concentration of anti-streptavidin not known, hence it is estimated)



“Saturation level” as a function of protein concentration

Fit model : $\Delta\lambda_{sat} = \frac{A * [C]}{k_D + [C]}$ “one site binding”

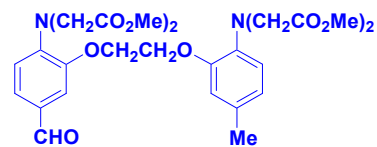
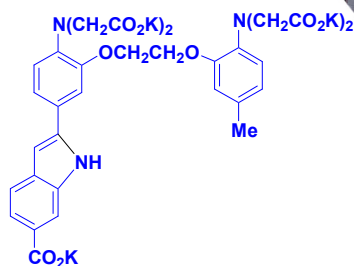
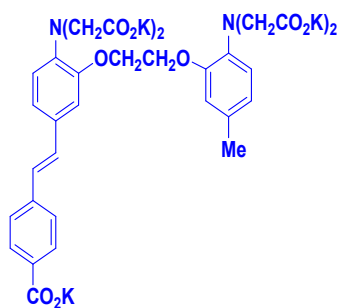


Custom Synthesis Services (Cat#80003)

AbboMax provides chemistry support to biotech and pharmaceutical companies. Our expertise in the area of organic/heterocyclic/combinational and medical chemistry enable us to assist your research in a fast delivery and cost-effective manner. Please contact us if you have any needs in bulk chemical compound synthesis.

Here are examples of our custom services:

Reference and standard compounds
Precursors and intermediates
Primary and focused libraries
Simple and complex peptides
Process development



Custom Liposome Preparation (#80004)

AbboMax offers custom liposome preparation as well as a various preformed liposome reagents with a large number of common lipid compositions to support the needs of research organizations involved in liposome drug delivery. Our high quality liposomes collection and custom services are performed by experienced formulators using the highest quality lipids only from premier suppliers. Our products are easy to use to save you time, cost and improve the productivity and reliability of your research. You can trust our products for batch-to-batch consistency and reproducibility. All products are sterile filtered and properly packaged in vials to ensure long-term stability when stored refrigerated.

Plain Non-PEG Liposomes
 Plain PEGylated Liposomes
 Liposomes with Ammonium Sulfate
 Transfection Reagents: Cationic Liposomes

Please contact us for further information:
info@abbomax.com
www.abbomax.com





ABBOMAX INC Custom Peptide/Antibody Order Form

Please fax, email or call AbboMax to place orders

Amino Acid Chart

A(Ala)	Alanine	C(Cys)	Cysteine	H(His)	Histidine	M(Met)	Methionine	T(Thr)	Threonine
R(Arg)	Arginine	Q(Gln)	Glutamine	I(Ile)	Isoleucine	F(Phe)	Phenylalanine	W(Trp)	Tryptophan
N(Asn)	Asparagine	E(Glu)	Glutamic Acid	L(Leu)	Leucine	P(Pro)	Proline	Y(Tyr)	Tyrosine
D(Asp)	Aspartic Acid	G(Gly)	Glycine	K(Lys)	Lysine	S(Ser)	Serine	V(Val)	Valine

Date: _____

PO#: _____

Phone: _____

Fax: _____

Shipping Address:

Billing Address:

Attn Name: _____

Attn Name: _____

Institute/Company: _____

Institute/Company: _____

Address: _____

Address: _____

Peptide Name	Sequences	Length of aa	Purity	Quantity	Modification	Antibody Production	
						Polyclone	Monoclonal

AbboMax, Inc
 2528 Qume Drive, Suite: #8
 San Jose, CA 95131
 Tel: 408-573-1898
 1-866-628-9898 (USA)
 Fax: 408-573-1858
 info@abbomax.com

Tel. 408-573-1898, Fax: 408-573-1858; e-mail: info@abbomax.com, www.abbomax.com

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