Custom Antibody Production Services

Services provided by Absea Biotechnology Ltd (Beijing, China)

Distributed by Chang Bioscience, Inc. (US)

Please fax orders to Chang Bioscience, Inc. Please mail antigens to Absea Biotechnology Ltd.

Absea Biotechnology Ltd Contact Information

Dr Wei Zhang Absea Biotechnology Ltd 1 Hao Lou, 602 Shi 3 Hua Yuan Road Beijing 100083 China

Tel: +86-10-65221947 Fax: +86-10-65284074

E-mail: info@absea-antibody.com

Chang Bioscience, Inc Contact Information

Chang Bioscience, Inc. 22689 Canyon Terrace Dr. Castro Valley, CA 94552

Fax: 415 680 1560 Tel: 415 377 7892

Email: info@changbioscience.com

Custom Antibody Production Services Summary

Rat Monoclone Antibody Services

Mouse Monoclone Antibody Services

 1 Antigen:
 \$4900 + \$250 (S&H)
 1 Antigen:
 \$4200 + \$250 (S&H)

 2 Antigens:
 \$9500 + \$250 (S&H)
 2 Antigens:
 \$8000 + \$250 (S&H)

 3 or more antigens:
 add \$4400 for each
 3 or more antigens:
 add \$3700 for each

15% discount if payment is upfront.

15% discount if payment is upfront.

Prices include rat immunization, fusion, ELISA tests for positive clones, subcloning, and expansion of 3 subclones. \$50 each additional subclones.

If no positive cells are found from first fusion by ELISA screening, we will do second fusion free of charge on customer's request. Prices include mice immunization, fusion, ELISA tests for positive clones, subcloning, and expansion of 3 subclones. \$50 each additional subclones.

If no positive cells are found from first fusion by ELISA screening, we will do second fusion free of charge if customer's request.

Rabbit Polyclonal Antibody Services

1 Rabbit: \$275 + \$50 (S&H) 2 Rabbits: \$525 + \$50 (S&H) 3 Rabbits: \$775 + \$50 (S&H)

Prices include free food & housing for up to 15 weeks, 3 to 5 injections, ELISA tests and free final bleed.

Rat Polyclonal Antibody Services

Mouse Polyclonal Antibody Services

1 Rat:	\$130 + \$50 (S&H)	1 Mouse:	\$110 + \$50 (S&H)
2 Rats:	\$245 + \$50 (S&H)	2 Mice:	\$205 + \$50 (S&H)
3 Rats:	\$360 + \$50 (S&H)	3 Mice:	\$300 + \$50 (S&H)

Prices include free food & housing for up to 15 weeks, 3 to 4 injections, ELISA tests and free final bleed. 2 or more rats are suggested for each antigen.

Prices include free food & housing for up to 15 weeks, 3 to 4 injections, ELISA tests and free final bleed. 2 or more mice are suggested for each antigen.

Additional Services

Peptide synthesis:	\$2	25/residue	FTIC conjugation:	\$150 / 5 mg
Carrier Protein conj	ugation: \$15	50 (2-5 mg)	Peroxidase conjugation:	\$150/ 5 mg
Coupling antigen or	nto beads: \$12	20 (2-5 mg)	Affinity purification:	\$300 / 5 mg
Repeated bleeding ELISA test for rabb Western blot:		\$100/bleed ml serum) enquire	IgG purification by protein A or G: Fab or (Fab')2 digestion:	\$300 / 5 mg enquire
Flow Cytometry:		enquire	ELISA kit development:	enquire
Additional monoclo	nal clones:	\$50/each		

^{*} All prices are in US dollars. Terms and prices are subject to change.

Rat Polyclonal Antibody Service Order Form

•	Bill To:	
	Name:	
Address:	Address:	
		_
-		
City/State/Zip:	City/State/Zip:	
	Country:	
	Phone:	
	Fax:	
	Email:	
Lillali.	Lilian.	
Services		Prices
Antigen Name/Code:		
Antigen Type:		
□ Protein		
□ Peptide		
	e)Subtotal	
Sequences (A)		
(B)		
(C)		
□ Peptide carrier conjugation (\$1	150 each peptide)	
If customer provides antigen, please fill the antig		
to info@absea-antib	oody.com.	
	·	
Antibody Production:		
□ First rat		\$130
□ Additional rats (\$115 each)	Number of rats:	
,		
Shipping & Handling:		
\$50 per order		_\$50
Additional services:		
	Total:	
Additional services:	Payment Information:	
□ Western blot: (enquire)	□ Purchase Order Number	
□ Flow cytometry: (enquire)	a raichase Order Number	
□ Peroxidase conjugation: (\$150)	Or	
□ FTIC conjugation: (\$150)	Oi	
□ Affinity purification: (\$300)	□ Credit Card	
□ IgG purification: (\$300)	Type □ Visa □ Master □ American E	vnreee
□ Fab or (Fab')2 digestion: (enquire)		
ELISA kit development (enquire)	Name on Card: Expiration Date:	
	Expiration Date.	
□ Other (enquire) Subtotal:	Total Amount:	
	Total Amount.	
Note		

Mouse Polyclonal Antibody Service Order Form

Ship To:	Bill To:	
Name:	Name:	
Address:	Address:	
		-
City/State/Zip:	City/State/Zip:	
	Country:	
	Phone:	<u></u>
	Fax:	.
1 40/11		
Email:	Email:	
Services		Prices
Antigen Name/Code:		1 11003
Antigen Type:		
□ Protein		
□ Peptide		
	e)Subtotal	
Sequences (A)		
(B)(C)		
- Dontido carrier conjugation (\$1	50 each peptide)	
If austomar provides entigen, places fill the entig	yon information shoot first and amail it	
If customer provides antigen, please fill the antig		
to info@absea-antib	ioay.com.	
Austile and a Duranta and		
Antibody Production:		#440
□ First mouse		<u>\$110</u>
□ Additional mouse (\$95 each)	Number of mice:	
Shipping & Handling:		
\$50 per order		<u>\$50</u>
Additional services:		
	Total:	
Additional services:	Payment Information:	
□ Western blot: (enquire)		
□ Flow cytometry: (enquire)		
□ Peroxidase conjugation: (\$150)	Or	
□ FTIC conjugation: (\$150)		
□ Affinity purification: (\$300)	□ Credit Card	
□ IgG purification: (\$300)	Type □ Visa □ Master □ American E	vnress
□ Fab or (Fab')2 digestion: (enquire)	Name on Card:	
□ ELISA kit development (enquire)	Expiration Date:	
Other (enquire)	Expiration bate.	
Subtotal:	Total Amount:	
Note	Total Amount.	
Note		

Rabbit Polyclonal Antibody Service Order Form

Ship To:	Bill To:	
Name:	Name:	
Address:	Address:	
City/State/Zip:	City/State/Zip:	_
	Country:	
	Phone:	
	Fax:	
	Email:	
Ellidii.	Liliali.	
Services		Prices
Antigen Name/Code:		
Antigen Type:		
□ Protein		
□ Peptide		
□ Peptide synthesis (\$25/residue	e)Subtotal	
Sequences (A)	·	
(C)		
	150 each peptide)	
If customer provides antigen, please fill the antig		
to info@absea-antib	ody.com.	
Antibody Production:		
□ First rabbit		_\$275_
□ Additional rabbit (\$250 each) Number of rabbits:		
Extension (optional):		
□ Repeated bleeding and ELISA tests		
(\$100 each 5-10 ml serum)	Total no of rabbits:	
Shipping & Handling:		
\$50 per order		_\$50
Additional services:		
	Total:	
Additional services:	Payment Information:	
□ Western blot: (enquire)	□ Purchase Order Number	
□ Flow cytometry: (enquire)		
□ Peroxidase conjugation: (\$150)	Or	
□ FTIC conjugation: (\$150)		
□ Affinity purification: (\$300) □ □ Credit Card		
□ IgG purification: (\$300)		xpress
□ Fab or (Fab')2 digestion: (enquire)	Name on Card:	•
□ ELISA kit development (enquire)	Expiration Date:	
□ Other (enquire)		
Subtotal:	Total Amount:	
Note		

Please fax your order to 415-680-1560 (Chang Bioscience, Inc.)

Mouse Monoclonal Antibody Service Order Form

Ship To:	Bill To:	
	Name:	
Address:	Address:	
City/State/Zip:	City/State/Zip:	
Country:	Country:	
Phone:	Phone:	
Fax:	Fax:	
Email:	Email:	
Services		Prices
Antigen Name/Code:		
Antigen Type:		
□ Protein		
□ Peptide	`	
	e)Subtotal	
Sequences (A)		
(B)		
(C)	50 each peptide)	
□ Peptide carrier conjugation (\$1	150 each peptide)	
If customer provides antigen, please fill the antig		
to info@absea-antib	oody.com.	
And the side of December 2 than 1		
Antibody Production:		# 4000
□ First antigen		_\$4200_
□ Second antigen (\$3800)	No of outleans.	
□ Additional antigen (\$3700 each)		
□ Additional subclones (\$50 each)		
□ 15% antibody production discount if cu		
Discounts apply to antibody production of		
upfront payment will be returned to custo	mers it production is terminated.	
Chinning 9 Handlings		
Shipping & Handling:		#050
\$250 per order		_\$250
Additional consisce:		
Additional services:		
	Total:	
Additional services:	Payment Information:	
□ Western blot: (enquire)	□ Purchase Order Number	
□ Flow cytometry: (enquire)		
□ Peroxidase conjugation: (\$150)	Or	
□ FTIC conjugation: (\$150)	□ Credit Card	
□ Affinity purification: (\$300) Type □ Visa □ Master □ American Ex		xpress
□ IgG purification: (\$300)		
□ Fab or (Fab')2 digestion: (enquire)	Expiration Date:	
□ ELISA kit development (enquire)		
Other (enquire)	□ 60% upfront payment	
Subtotal:	Total Amount:	
Note		

Rat Monoclonal Antibody Service Order Form

Ship To:	Bill To:	
Name:	Name:	
Address:	Address:	
City/State/Zip:	City/State/Zip:	
	-	
	Country:	
	Phone:	
Fax:	Fax:	
Email:	Email:	
Services		Prices
Antigen Name/Code:		
Antigen Type:		
□ Protein		
□ Peptide		
□ Peptide synthesis (\$25/residue	e)Subtotal	
Sequences (A)		
(B)		
(C)		
	150 each peptide)	
If customer provides antigen, please fill the antig		
to info@absea-antib		
to iiiio @absca antib	ody.com.	
Antibody Production:		
□ First antigen		¢4000
		<u>\$4900</u>
□ Second antigen (\$4600)	NI C C	
□ Additional antigen (\$4400 each)		
□ Additional subclones (\$50 each)		
□ 15% antibody production discount if cu		
Discounts apply to antibody production cl		
upfront payment will be returned to custo	mers if production is terminated.	
Shipping & Handling:		
\$250 per order		\$250
· '		
Additional services:		
, taattoriar cor vicco:	Total:	
	Total.	
Additional services:	Payment Information:	
□ Western blot: (enquire)	□ Purchase Order Number	
□ Flow cytometry: (enquire)		
□ Peroxidase conjugation: (\$150)	Or	
□ FTIC conjugation: (\$150)	□ Credit Card	
□ Affinity purification: (\$300)	Type □ Visa □ Master □ American E	xnress
□ IgG purification: (\$300)	Name on Card:	
□ Fab or (Fab')2 digestion: (enquire)	Expiration Date:	
□ ELISA kit development (enquire)	Expiration Date.	
	- COO/ confinent necessari	
□ Other (enquire)	□ 60% upfront payment	
Subtotal:	Total Amount:	
Note		

Antibody Production Protocol

Please contact us if you have special instructions.

Rat/Mouse Monoclonal Antibody Production Protocol

Week 1	SDS-PAGE for antigen, antigen preparation, injection & pre-bleed for 5
vveek i	animals.
Week 4	2 nd injection
Week 7	3 rd injection
Week 9	Test bleed & ELISA. We shall report our ELISA results to customers. Good antibody responses will show positive when anti-sera are diluted 50000 times
	or more. If antibody titter is poor, we'll do one more injection.
	Note : (1) Project may be terminated at this stage if antibody titter is not satisfactory. (2) If project is terminated, customers who do not pay upfront will
	be charged for 30% of the total cost of the whole project. (3) Customers who have paid upfront will get refund money. Refund = 60% upfront
Week 13	Last challenge and fusion
Week 15	Selection of positive clones by ELISA. We shall report our ELISA results to customers. The number of positive clones varies. Normally it is between 5 to 50.
	Note : (1) If no positive clones are found, we will do second fusion free of charge on customer's request. (2) Project may be terminated at this stage. (3) If project is terminated, customers who do not pay upfront will be charged for 60% of the total cost of the whole project. (4) Customers who have paid upfront do not need pay any more money.
Week 17	If customers need to test themselves, we'll send 150 μl supernatants to customers. Customers should tell us their decisions within 10 days after receiving the supernatants. We cannot keep cells un-subcloned for a long time as they may get lost after long time culture.
	Note : (1) Customers should be aware that antibodies that work for ELISA may not work for other tests such as Western blotting, flow cytometry, or histochemistry. When this happens, we normally do not do fusion again as the results will be most likely the same as before. Therefore, project may be terminated at this stage. (2) If project is terminated, customers who do not pay upfront will be charged for 60% of the total cost of the whole project. (3) Customers who have paid upfront do not need pay any more money. (4) Some customers may want us to do one more fusion. We shall charge \$900 for this additional fusion.
Week 19	Subcloning. Customers will decide how many clones they want. We then do subcloning until all cells are positive.
Week 23	Successfully subcloned cells will be expanded and frozen down.
	Note : (1) Customers who do not pay upfront and ask for less than three cell lines will be charged for 100% of the total cost. Additional subclones will be charged for \$50 each. (2) Customers who have paid upfront and ask for less than three cell lines will pay the rest amount of money. Additional subclones will be charged for \$50 each.
Week 24	Less than 8 clones will be sent out at room temperature in culture flasks. If there are more than 8 clones, we suggest that the cells are sent on dry ice in frozen vials. However, additional postage will be made for dry ice transport.
Week 30	Unless specially arranged, we shall discard cells 6 weeks after customers have received them.
Optional	We also offer additional services such as Western, antibody conjugation to HRP and FITC, FACS, and antibody purifications.

Rat/Mouse polyclonal antibody service

Week 1 Day 1	SDS-PAGE for antigen, injection & pre-bleed (10-30 µl serum)
Week 4 Day 22	2 nd injection
Week 7 Day 43	3 rd injection
Week 8 Day 50	Test bleed (10-30 μl serum)
Week 8 Day 51	ELISA test for antibody titter
Week 8 Day 53	If ELISA shows good antibody titter, we may do the final bleed (1.5-4 ml serum per rat and 0.2-0.5 ml serum per mouse). If ELISA shows poor antibody titter, we'll do one more boost injection and ELISA test.

Rabbit polyclonal antibody service

Week 1 Day 1	SDS-PAGE for antigen, injection & pre-bleed (500 µl to 1 ml serum)
Week 3 Day 15	2 nd injection
Week 6 Day 36	3 rd injection
Week 7 Day 43	Test bleed (500 μl to 1 ml serum) & ELISA
Week 7 Day 46	If ELISA shows good antibody titter, we may do the final bleed (30-60 ml serum).
	If ELISA shows poor antibody titter, we'll do one more boost injection and ELISA test.
Optional	If a customer wishes to continue, we offer multiple bleeding. Customers will be charged \$100 for each additional bleeding.

Absea Antigen Information Sheet

In order to successfully make antibodies for your antigen, it is very important that we have some information about the antigen. Please fill the antigen information sheet (one sheet for one antigen) and email it to us as an attached document to info@absea-antibody.com or fax it back to us on +86-10-65284074. We shall quickly tell you if we would like to take the project.

Name/code of your antigen:

Please tick as appropriate for your antigen.

Does the antigen belong to mouse protein? Yes () No ()
Does the antigen belong to rat protein? Yes() No()
Does the antigen belong to rabbit protein? Yes() No()
Is the antigen stable? Yes() No() Unknown()
Is the antigen soluble? Yes() No() Concentration and solvent of your antigen?() If preservative is added, what is it?()
Is it a fusion protein? Yes() No() If yes, what is the fusion partner?()
Molecular weight? (kDa)
Purity by SDS-PAGE? More than 90%() 70-90%() Less than 70%()
Is the antigen toxic? Yes() No() Unknown()
Is the antigen infectious? Yes() No() Unknown()
Amount you could provide? More than 1.5 mg()1-1.5 mg() Less than 1 mg()
Want to get? Mouse monoclonals() Rat monoclonals() Rabbit polyclonals() Rat polyclonals() Mouse polyclonals()
Marketing rights to Absea? Agree() Disagree()

Your details:

Name	
Address	
City	
Postcode (zip)	
Country	
Telephone	
Fax	
Email	