



DUAL SPECIES POLYCLONAL ANTIBODIES

Thanks to this new addition to our list of high performance polyclonal services, you can select the immunization of 2 different species of favourable prices.

Dual Species Polyclonal Antibody production includes use of 2 rabbits AND 4 mice OR 3 rats immunized with:

- Recombinant or natural proteins
- 1 or more synthetic peptides conjugated to carrier protein (either OVA or KLH) supplied by customer or produced by Primm.

Polyclonals from 2 different species can be considered as two separate antibody preparations, thus double reagents for the customer, double chance to get good and useful antibodies. In addition, you have the possibility to go from mouse/rat polyclonal to monoclonal antibodies generation.

Different antigen samples, like for example protein band excised from SDS-PAGE, can be also accepted.

ANTIGEN	ANTIGEN QUANTITY	
	2 RABBITS & 4 MICE	2 RABBITS & 3 RATS
PROTEIN in PBS or TRIS buffer or UREA buffer	3 mg, 0.5 mg/ml	3 mg, 0.5 mg/ml
LYOPHILIZED SYNTHETIC PEPTIDE/S	10 mg	10 mg

Additional quantity of antigen can be requested in case of monoclonal antibodies development.

STANDARD PROTOCOL FOR IMMUNIZATION WITH SOLUBLE PROTEIN:

IMMUNIZATION TIME	PROTEIN		
	RABBIT	MOUSE	RAT
Preimmune serum collection	1 ml/rabbit	200 µl serum pool	1.5 ml serum pool
T0 1st immunization	200µg Ag in CFA	50 µg Ag in CFA	100 µg Ag in CFA
T21 2nd immunization	100µg Ag in IFA	20-40 µg Ag in IFA	50 µg Ag in IFA
T28 3rd immunization	100µg Ag in IFA	20-40 µg Ag in IFA	50 µg Ag in IFA
T35 Bleed + ELISA* test	500 µl	50 µl	50 µl
T37 4th immunization	50-100µg Ag in IFA	10-20 µg Ag in IFA	25 µg Ag in IFA
Final Bleed	40-50 ml/rabbit	0.2-0.5 ml/mouse	3-7 ml/rat



STANDARD PROTOCOL FOR IMMUNIZATION WITH SYNTHETIC PEPTIDE:

IMMUNIZATION TIME	PEPTIDE		
	RABBIT	MOUSE	RAT
Preimmune serum collection	1 ml/rabbit	200 µl serum pool	1.5 ml serum pool
T0 1st immunization	300 µg Ag in CFA	50 µg Ag in CFA	150 µg Ag in CFA
T21 2nd immunization	300 µg Ag in IFA	50 µg Ag in IFA	150 µg Ag in IFA
T28 3rd immunization	300 µg Ag in IFA	50 µg Ag in IFA	150 µg Ag in IFA
T35 4th immunization	300 µg Ag in IFA	50 µg Ag in IFA	150 µg Ag in IFA
T42 Bleed + ELISA* test	500 µl	50 µl	50 µl
T45 5th immunization	150 µg Ag in IFA	50 µg Ag in IFA	150 µg Ag in IFA
Final Bleed	40-50 ml/rabbit	0.2-0.5 ml/mouse	3-7 ml/rat

***Serum positivity is guaranteed at a dilution of the serum equivalent to 1:10,000 as compared to pre-immune serum in ELISA test against the protein antigen.**

CFA Complete Freund Adjuvant
IFA Incomplete Freund Adjuvant

TIME REQUIRED:

ANTIGEN	TIME REQUIRED	
	2 RABBITS & 4 MICE	2 RABBITS & 3 RATS
ANTIGEN SUPPLIED BY CUSTOMER	1.5/2 months	1.5/2 months
PRIMM RECOMBINANT PROTEIN	2.5/3 months	2.5/3 months
PRIMM SYNTHETIC PEPTIDES	2.5/3 months	2.5/3 months



DELIVERED PRODUCTS:

DELIVERED PRODUCTS	RABBIT	MOUSE	RAT
Preimmune sera	1 ml/rabbit	200 µl serum pool	1.5 ml serum pool
Immune sera (*)	40-50 ml/rabbit	0.2-0.5 ml/mouse	3-7 ml/rat
3 mg of each Primm synthetic peptide or max 500 µg of recombinant protein + 5 µg of expression plasmid DNA			

(*) At additional charge, Primm can send an intermediate bleed and maintain alive the animals (mice or rats) for about three weeks, to let the customer test and choice if proceed with monoclonal antibody development and with which animals.

ADDITIONAL SERVICES (at additional charge):

ADDITIONAL SERVICES	RABBIT	MOUSE	RAT
Testing of 5 or 10 preimmune sera to select animals before immunization	yes	no	no
Prolongation of immunization protocol	yes	yes	yes
Monoclonal Antibody Development (*)	no	yes	yes
Affinity Purification against antigen of half serum/animal keeping separated each purified prep of each animal) + ELISA test	<u>Required Antigen Qt.</u> 6mg lyophilized free peptide or 3mg protein 0.5 mg/ml	no	no
Affinity Purification against antigen of total serum/animal keeping separated each purified prep of each animal) + ELISA test	<u>Required Antigen Qt.</u> 6mg lyophilized free peptide or 5mg protein 0.5 mg/ml	no	no
Affinity Purification against Protein A of half serum/animal keeping separated each purified prep of each animal) + ELISA test	yes	no	no
Affinity Purification against Protein A of total serum/animal keeping separated each purified prep of each animal) + ELISA test	yes	no	no