Antibodies

For Life Science Research

> Custom monoclonal antibodies
> Custom polyclonal antibodies
> Custom Ab fragments
> Catalogue antibodies
To follow the latest trends in the field of antibodies and to be at the forefront of technological innovation, we continuously improve our production facilities and services. This enables us to offer you the widest choice among cutting-edge antibodies and best programme options.

**IN CONSTANT INNOVATION**

Stable and trusted antibody services since 1996
More than 1500 programmes every year
From ready-to-use catalogue antibodies to fully customised production programmes
From research antibodies to GMP production of antibody fragments
Highly skilled project managers dedicated to your project
**Eurogentec Antibodies**

<table>
<thead>
<tr>
<th>Custom</th>
<th>Catalogue</th>
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<tr>
<td>Polyclonals</td>
<td>Monoclonals</td>
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- **p7** Custom antibodies
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**Eurogentec Know-how**

**Scientific advise and support**

- Eurogentec has long been recognised for its quality support regarding catalogue antibodies. This first line support service is available by phone, e-mail or live chat at any stage of your project.

- For any custom programme our project managers will guide and support you all along your specific antibody development.

**Antigen**

- Eurogentec's antibody team offers a high level expertise in the design and synthesis of immunogenic peptides as well as in the production of recombinant proteins or DNA.

- Pathogenic antigens are handled with the appropriate precautionary measures in the biosafety level 2 zone of Eurogentec’s facilities.

**Immunisation**

- Our proprietary Speedy 28-Day polyclonal programme reduces the immunisation time to 28 days. It uses a combination of non-Freund’s adjuvants that stimulates the host’s immune response and generates a high IgG/IgM ratio.

- For difficult antigens, Eurogentec generates antibodies using genetic immunisation.

**Antibody**

- Eurogentec has distributed ready-to-use catalogue Abs for many years. Based on this long-standing expertise, we now offer a new range of top-quality primary antibodies.

- Eurogentec is a pioneer in the in vitro production of monoclonal antibodies. Since 2004, we have continuously improved and optimised the culture conditions to get the most out of your hybridomas.

- Eurogentec uses the largest animal facility in EU allowing us to manage numerous, small to very large-antibody projects.

- For therapeutics applications, we provide custom V_{H} and mAb fragments, which can be produced under ISO 13485 and GMP standards.

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In addition to our high-quality catalogue antibodies, we offer the most flexible and comprehensive services for the production of custom antibodies. Taking advantage of our state-of-the-art expertise and technologies, we can design the antibody programme that best suits your research.
Custom antibodies

Whether you are a research laboratory, a university centre or a pharmaceutical company, Eurogentec offers you a range of flexible antibody services tailored to your specific needs. Immunisation in diverse hosts can be performed with several antigens such as peptides, proteins, cell extracts or DNA. These antigens can be provided by you or produced by Eurogentec. We are experts in the generation of polyclonal (pAb) and monoclonal (mAb) antibodies for simple projects to large and high-demanding projects.

We offer a continuum of production capabilities including manufacturing for therapeutic applications. We can produce your recombinant Ab fragment (including Fab, scFv and nanobody) in our FDA inspected GMP Biomanufacturing facility for use in human clinical trials.

We know that confidentiality is important for you and we handle your data and projects with utmost care and respect. All hybridoma, sera and results obtained belong to the customer and will remain as a property of the customer*. Eurogentec guarantees that it will not claim any rights on the hybridoma or the antibodies. If desired, a Non-disclosure Agreement concerning our production and the customer’s purpose can be executed.

*Both monoclonals and polyclonals can be raised in mice and rabbits (please note that hybridoma development in Rabbits is patent-protected).
THE BEST HOST FOR YOUR PROJECT

**KEY FACTORS**

**Antigen homology**

- The lower the homology between the antigen and the host, the higher the immune response. Hence, the selection of a chicken host may be useful if a conserved mammalian protein is selected as the antigen.

**Ab quantity**

- Avoid immunisation of several small animals in parallel.
- Suitable for most of the projects.
- Useful to compare immunogenicity of various antigens.

**Applications**

- Detection
  - If a secondary Ab is to be used in the final application, one may favour one host over another based on the availability of this secondary Ab.
  - Less frequent
  - Low reproducibility

- Therapeutics
  - We produce polyclonal and monoclonal Llama antibodies and collaborate with GVG to provide V, H fragments. Their small size makes them of high value for therapeutics interest.

**Usage**

- Rabbit is the most widely used host for pAb production because of its easy maintenance and efficient immune system. Moreover, the quantity of serum collected is suitable for most of the projects.

- Mice are ideal for mAb production, see p14.

- Rats and guinea pigs are recommended for small quantities of high quality polyclonal antibodies at an affordable price.

**mAb**

- Mice are ideal for mAb production, see p14.

- Rabbits mAbs are patent-protected. Eurogentec can assist you by immunising the animal, checking the immune response and isolating the B-cells from the spleen.

**Immunisation Schedule**

### SPEEDY 28-DAY

- Immunisation lasts 28 days.
  - Recommended for:
    - A strong and quick response
    - An anti-PTM programme
    - A quick access to a small quantity of purified and ready to use pAb (with the ‘Speedy Mini’ programme)

### CLASSICAL

- Immunisation lasts from 65 to 90 days depending on the host and the immune response.
  - Recommended for:
    - Repeating a pre-existing protocol already conducted with a classical programme
    - Immunising a host where the Speedy 28-Day programme is not possible or not guaranteed (chicken, mouse, large animals, …)
    - An antigen of poor immunogenicity that may require prolongation of the programme

**Custom polyclonal antibodies**

Eurogentec provides a wide range of efficient custom polyclonal programmes extending from classical to the fastest proprietary programme, Speedy 28-Day. You can also benefit from our expertise in the production of your antigen either peptides or proteins.

**Additional services**

- Including antibody coupling, labelling and additional purifications are available. See p. 19 for more information.

**Eurogentec Antibodies**

- **Recommended for**
  - A strong and quick response
  - An anti-PTM programme
  - A quick access to a small quantity of purified and ready to use pAb (with the ‘Speedy Mini’ programme)

**Immunisation Schedule**

**GOOD TO KNOW**

- **Eurogentec offers recombinant protein production on request:** proteomics.services@eurogentec.com

**Additional services** including antibody coupling, labelling and additional purifications are available. See p. 19 for more information.
### Classical programmes

<table>
<thead>
<tr>
<th>Peptide</th>
<th>Length</th>
<th>Quantity</th>
<th>Coupling to a carrier (KLH, BSA, OVA, THY or MAP)</th>
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</thead>
<tbody>
<tr>
<td>Anti-antigen</td>
<td>anti-peptide</td>
<td>Double X</td>
<td>Anti-PTM*</td>
</tr>
<tr>
<td>You provide the antigen* (peptide, protein, complex sample)</td>
<td>Eurogentec designs and synthesizes one peptide</td>
<td>Eurogentec designs and synthesizes two peptides to increase the chances of success</td>
<td>Eurogentec designs and synthesizes two peptides: one modified with the PTM and one unmodified</td>
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<td>15-25 mg</td>
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### Speedy 28-day programmes

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<th>Coupling to a carrier (KLH, BSA, OVA, THY or MAP)</th>
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### Immunisation

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<td>Big animal (pig, sheep, cow,…</td>
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### ELISA

- Specific response at 1/20000 guaranteed (at least for one of the 2 peptides)
- Specific response at 1/20000 guaranteed at 1/20000 guarantee
- No Result, No Serum, No Invoiced

### Affinity Purification

- Double purification of 50 mL serum
- Purification of 10 mL serum
- Purification of 10 mL serum
- Double purification of 50 mL serum

### QC validation

- ELISA
- ELISA
- ELISA
- ELISA

### Delivery

- Serum
- Purified antibody (Optional) Remaining peptide
- Serum
- Purified antibody (Optional) Remaining peptide
- Serum
- Purified antibody (Optional) Remaining peptide
- Serum
- Purified antibody (Optional) Remaining peptide
- Serum
- Purified antibody (Optional) Remaining peptide

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* = not applicable  
= Optional

- a. See the section “How to provide my antigen” on p.25 for more details
- b. Other hosts are available on request
- c. The guarantee only applies for peptides when approved by Eurogentec
- d. The guarantee does not apply for Goat immunisation
- *Post Translational Modification
Chicken immunisation

Using a non-mammalian host for immunisation allows considering even highly conserved mammalian proteins as targets. Moreover, hens produce antibodies in their eggs, avoiding the animal final bleed.

Advantages of choosing a chicken immunisation programme

- Using chicken IgY often leads to less background in your application.
- It allows targeting mammalian proteins that are highly conserved among classical hosts.
- It produces high quantity of IgY antibodies: 4 eggs contain as much antibody as the serum from one rabbit (200 mg total IgY containing 2-10% antigen-specific IgY).
- You will receive 10 to 20 eggs yolks harvested within 90 days (one egg yolk pool by hen)*
- We perform IgY purification from egg yolk.

Post Translational Modifications (PTMs)

Thanks to our strong expertise in producing antibodies against PTMs, we can target classical modifications as well as more complex ones. The Speedy 28-Day programme is particularly adapted for the generation of antibodies against PTM due to the high frequency of the injections.

Options for your polyclonal programme

1. Screening

Screening the pre-immune serum can be performed on several animals to select the one with the lowest background in your application. For this purpose, you will receive 5, 10 or 20 pre-immune sera samples from different animals to allow you selecting the one(s) best suited for your application.

Immune response monitoring

ELISA is an excellent option to follow the evolution of an immune response during an immunisation.

The ELISA tests are carried out in one 96-well plate per animal. We test in parallel, per ELISA, dilutions from:

- Pre-immune sera
- Small bleed
- Large bleed

Against

- The free peptide
- The carrier protein
- Positive and negative controls.

PTM programme step by step

- Design and synthesis of 2 peptides (1 non-PTM + 1 harbouring the PTM)
- Coupling of the PTM peptide to a carrier
- Immunisation of the hosts using the PTM peptide following the Speedy 28-day or a classical 87-day protocol
- Analysis of the immune response by ELISA and if applicable, selection of the best responding host
- Double affinity purification of the pAb using the PTM and subsequently the non-PTM peptide (see figure above)
- ELISA testing of the purified pAb against the non-PTM and PTM peptides
- Shipping

NOTE

* In average, 8 to 10 egg yolks will be harvested per chicken immunisation (depending on the laying).
Custom monoclonal antibodies

Eurogentec develops hybridomas in mouse and produces mg to g scale mAbs exclusively in vitro. We offer cell banking facilities for a backup of your hybridomas whether you are a research laboratory or a pharmaceutical company.

**HYBRIDOMA GENERATION**

Eurogentec develops murine hybridomas in 16-19 weeks following a stepwise approach with testing sample phases. A reporting is sent after each phase and discussed with the customer for potential adaptation. If no positive hybridoma is obtained after phase 3, only phase 1 will be charged.

**PROJECT DEVELOPMENT**

Prior to project initiation, you can benefit from our personalised project proposals and expertise.

To qualify and build your project or to receive a quotation adapted to your needs, please contact your local representative or send us an e-mail at monoclonals@eurogentec.com.

**STARTING MATERIAL**

You send us:

* Your purified protein
* Or your peptide sequence
* Or your protein's accession number
* Or other antigen

**IN VITRO PRODUCTION**

You receive:

* ELISA report against the supplied antigen and serum sample
* Fusion report

**PHASE 1: IMMUNISATION**

Immunisation of >4 mice (6 weeks)

You receive:

* ELISA report against the supplied antigen and serum sample

**PHASE 2: FUSION/HYBRIDOMA PRODUCTION**

Mouse lymphocytes

Specific Antibody

Secreting Cells Ig positive

Hybridoma

Myeloma Immortality Property Hypoxanthine G418

Phosphoribosyl Transferase (HPT) negative, Ig negative

Spincell + Myeloma cell Sp2/OAg 14

You receive:

* Fusion report

**PHASE 3: SCREENING FOR POSITIVE HYBRIDOMAS**

4 - 5 weeks

Lymphocytes die off on their own time

Only hybridomas survive

Hypoxanthine Aminopterin Thymidine (HAT) treatment kills off excess myeloma cells

Each cell potentially produces a different monoclonal.

Screen wells for positive hybridomas by ELISA*

You receive:

* Screening report, ELISA against your antigen, Delivery of >1 ml positive supernatants (Maximum 30).

**PHASE 4: CLONING AND ISOTYPING OF POSITIVE HYBRIDOMAS**

4 - 5 weeks

Cloning by serial dilution to get one cell type per well.

Test each well to find desired positive clones and then isotype.

You receive:

* Hybridomas ELISA and isotyping report, Delivery of >10 ml of supernatant from 1-2 positive clones, Frozen hybridomas.

**TEST PHASE**

In biocontainers

Leak Resistant or Add Displacement Medium

Harvested Concentrated Protein (Y)

You choose the purification:

* Protein A
* Protein G
* Affinity
* No purification

**AB PROCESSING**

Various antibody options

Labeling, fragmentation, sequencing, choice of different buffers, mAb concentration, lyophilisation.

You receive your antibody

**BENEFITS**

- Efficiency: highly reproducible production of high quality mAbs
- Flexibility: a large and comprehensive panel of services
- Attractivity: a production batch using a normal hybridoma producer usually yields enough antibody material for an entire project!
- Rapidity: only one month turnaround time

**In vitro production**

The European legislation 2010-63-UE highly encourages producing mAbs in vitro, and more and more countries now prohibit the mAb production in ascites, a method associated with animal pain and distress. Prior to this recommendation, Eurogentec already switched to the in vitro production of mAbs and therefore developed a deep expertise as well as highly efficient production protocols. We perfectly control the production of mAbs from flasks to bioreactors (1000L).

**DO YOU NEED RABBIT MONOCLONALS?**

Rabbits mAbs are patent-protected. Eurogentec can assist you by immunising the animals and checking the immune response, then removing the spleen and isolating the B-cells.

www.eurogentec.com
Genetic immunisation

Eurogentec offers the production of antibodies from DNA templates. In case of difficult targets such as insoluble, instable or toxic proteins, genetic immunisation is a good alternative to classical immunisation methods. It indeed bypasses protein production, purification and refolding demanding steps. The available hosts for genetic immunisation are mouse and rabbit.

**IN 4 STEPS**

1. **GENE SYNTHESIS OPTIMISATION**
   - DNA synthesis and cloning into a proprietary vector containing the booster sequence encoding a membrane protein
   - DNA sequencing
   - Small scale plasmid production
   - Transient transfection of NIH3T3 cells
   - Analysis of the surface expression of the antigen by FACS using antibodies against the booster sequence
2. **CLONING**
   - 4 mice or rabbit (on request)
3. **IMMUNISATION**
   - Large scale plasmid production
   - Immunisation of animals
   - Analysis of the sera (polyclonal antibodies) by FACS using cells transfected by the vector encoding the antigen sequence
4. **POLYCLONAL AB PRODUCTION**
   - Receive polyclonal antibodies (complete serum)

**OR CONTINUE WITH THE DEVELOPMENT OF MONOCLONAL ANTIBODIES**

**DNA IMMUNISATION TECHNOLOGY**

Representation of NIH3T3 cells expressing on their surface the antigen booster fusion protein.

mAb fragments

Eurogentec has renowned expertise in the capacity to produce large amounts of recombinant proteins including mAb fragments in patent free strains of Pichia pastoris. Multiply clones are isolated using Eurogentec’s proprietary plasmids (high yield). To start producing your antibody fragments, you have to provide the sequence of your choice. Please contact info.biologics@eurogentec.com if you are interested.

All antibody fragments can be produced:
- Fabs
- Nanobodies
- scFv
- And more

**CONTACT**

Pascal Bolon
p.bolon@eurogentec.com

**GOOD TO KNOW**

Eurogentec is an expert in protein production in various strains. If you dispose of a specific strain expressing your Ab fragment, contact us for a feasibility study.

Since 1996, we have established trusted collaborations with many Big Pharma’s and biotechnology companies around the world to develop and produce clinical trial materials.
Llama antibodies and monoclonal V_H production

Camels produce single-chain antibodies in addition to conventional ones. The antigen binding domains of these antibodies, called V_H, are the smallest naturally occurring antibody fragments that recognise the antigens. In collaboration with QVQ, we accompany you from llama immunisation to V_H production including lymphocyte isolation and mRNA extraction. Eurogentec can label your V_H fragments on request.

**At Eurogentec, we generate llama polyclonal antibodies targeting multiple antigens, and offer a wide range of additional services.**

- **Immunisation**
  - Programme: customer dependent; 5 to 10 weeks
  - Antigen: from the customer or produced at Eurogentec. Protein amount required per immunisation: 0.5 mg/llama (2 llamas are scheduled for immunisation)
  - Standard immunisation schedule: Pre-immune bleed (day 0): 4 injections (day 0, 14, 28 and 35), 2 bleeds (day 28 and 42)
  - Testing of immune response ELISA testing against the antigen is generally performed. This step may require an additional amount of antigen.
  - Deliverables: the programme can be stopped here and you receive pAb.

- **RNA extraction**
  - The lymphocytes can be isolated from a blood sample (7-250 mL) followed by RNA extraction. Please note that lymphocytes isolation and RNA extraction must be performed very rapidly after the blood sampling to avoid RNA degradation. RNA is checked for quality prior to sending.
  - Deliverables: the programme can be stopped here and you receive mRNA.

- **Monoclonal V_H selection**
  - The service of V_H generation includes one or several of the following steps:
    - Library construction
    - Deliverables: two libraries with size >10^7 different clones and >90% insert.
    - Selection and screening for high affinity V_H clones + sequence determination.
    - Deliverables: the sequences of at least 6 binders from 2 families.
    - Production, V_H single domain antibody production and purification.
    - Deliverables: 0.5 mg protein of the lead clones produced in E. coli and purified (>90%).

**At QVQ, we generate V_H phage display libraries and perform selection and screening of high affinity monoclonal V_H.**

- **Immunisation**
  - Programme: customer dependent; 5 to 10 weeks
  - Antigen: from the customer or produced at QVQ. Protein amount required per immunisation: 0.5 mg/llama (2 llamas are scheduled for immunisation)
  - Standard immunisation schedule: Pre-immune bleed (day 0): 4 injections (day 0, 14, 28 and 35), 2 bleeds (day 28 and 42)
  - Testing of immune response ELISA testing against the antigen is generally performed. This step may require an additional amount of antigen.

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    - Production, V_H single domain antibody production and purification.
    - Deliverables: 0.5 mg protein of the lead clones produced in E. coli and purified (>90%).

**Benefits**

- **Better targeting**
  - Due to their small size (~15 kDa), V_H can also bind epitopes that are hidden, hence targeting precision is higher compared to conventional antibodies.

- **Easier production**
  - The small size of V_H makes them relatively easy to produce in lower eukaryotes up to very high amounts and purities.

- **Unique properties**
  - V_H have a high tissue penetration and are cleared from circulation rapidly. Some V_H can even cross the blood brain barrier.

- **Higher stability**
  - V_H are stable under extreme pH, temperature and against proteases; hence, they keep their native folding and epitope binding capacity under very diverse experimental conditions.

**Additional Services**

- **ELISA testing**
  - Eurogentec can assay your antibody in various applications including ELISA and western-blot.

- **Purification**
  - We can perform purification of total IgG (IgG in chicken) or affinity purification using the antigen.

- **Labelling**
  - To avoid using a labelled secondary antibody, your specific primary antibody can be labelled with the molecule of your choice. We offer a large panel of dyes and labels (refer to our Protein Labelling brochure).
    - Fluorophores are ideal for flow cytometry and fluorescent microscopy. They include AnaSpec’s proprietary high-quality fluorophores HiLyte™ Fluor and Olyxyze Fluor.
    - Alkaline phosphatase (AP) allows the detection of an antibody with colourimetric substrates.
    - Horse Radish Peroxidase (HRP) is detectable by colorimetry and by chemiluminescence that offers a better sensitivity than colorimetry.
    - Biotin reacts extremely specifically with streptavidin substrates.

- **Fragmentation**
  - It has been shown that many cells have receptors for the Fc fragment of antibodies leading to unspecific background. To avoid such a background signal, Eurogentec selectively cleaves your antibodies into fragments and provides you with Fab or F(ab’)2.

**Deliverables**

- **F(ab’)2**
  - Available for microdosing studies or crystallography up to GMP in human.

- **pAb**
  - For production, physical and “in vitro” production for microdosing studies.

**Library construction**

- **Library construction**
  - Delivery
  - mRNA
  - Purification

**Panning**

- **Panning**
  - Delivery
  - mRNA
  - Purification

**Screening**

- **Screening**
  - Delivery
  - mRNA
  - Purification

**Selection**

- **Selection**
  - Delivery
  - mRNA
  - Purification

**Monoclonal V_H selection**

- **Selection**
  - Delivery
  - mRNA
  - Purification

**Immunisation**

- **Immunisation**
  - Delivery
  - mRNA
  - Purification

**RNA extraction**

- **RNA extraction**
  - Delivery
  - mRNA
  - Purification

**Monoclonal V_H selection**

- **Selection**
  - Delivery
  - mRNA
  - Purification

**ELISA testing**

- **ELISA testing**
  - Delivery
  - mRNA
  - Purification

**Purification**

- **Purification**
  - Delivery
  - mRNA
  - Purification

**Labelling**

- **Labelling**
  - Delivery
  - mRNA
  - Purification

**Fragmentation**

- **Fragmentation**
  - Delivery
  - mRNA
  - Purification

**Additional Services**

- **Other available services**
  - Secondary antibodies
  - Protein A coupled to fluorescent dyes and biotin, see p. 23
**Coupling to magnetic beads**

Eurogentec has joined forces with a state-of-the-art beads manufacturer to couple your antibody to magnetic beads. To ensure the success and convenience of your experiments, we selected the best beads regarding size distribution, magnetic content consistency, binding surface, sedimentation property, easiness of protein handling and size.

**Epitope mapping**

To determine the protein epitope specifically recognized by an mAb, Eurogentec can design and synthesize a peptide library which spans the sequence of the target protein, and screen this library in a 96-well format to identify the peptide region which harbors the mAb epitope.

**A. Peptide design**

You provide:
- The protein sequence
- The desired peptide length (13-mer peptides are suggested)
- The desired overlap (7 aa overlaps are suggested)

You receive:
- Assistance with the peptide design
- The synthesized peptides (96-well formats), biotinylated on request

**OPTION**

Synthesized peptides (≥10 aa) can be biotinylated to assure better and oriented fixation onto the support.

**Streptavidin precoated plate may be used to capture biotinylated peptides.**

**B. Library screening and epitope characterisation**

You provide:
- The Primary Antibody (purified; 1 mg/mL in PBS shipped on dry ice)
- A positive control (optional)
- Information about the species in which the primary Ab was raised

You receive:
- ELISA Analysis Report
- The sequence of the Ab binding site(s)

**1. Plate Coating**

**2. Screening for the Primary Antibody epitope**

**3. Detection using a labelled Secondary Antibody**

One plate is coated with 24 different designed peptides in triplicate. Addition of your Primary Antibody (dilution 1:1000)
- Labelling secondary antibody: Anti-rabbit
- Anti-rat
- Anti-mouse
- Anti-guinea pig
- Anti-chicken
- Anti-human or other on request

**4. Epitope characterisation by ELISA**

Selected positive peptides (triplicate) are incubated with various antibody dilutions (1:1000, 1:3000 and 1:9000)

**Eurogentec Antibodies**

Eurogentec has always been a major European distributor of high-quality catalogue antibodies recognized for its responsible and high-level technical support. Based on this strong experience, Eurogentec launched OptimAb™ antibodies, its own range of catalogue antibodies fulfilling the same quality standards.

**FEATURES**

- Top quality antibodies
- Clones with highest reputation
- Key protein targets
- Skilled technical support

**Applications**

- Preparative purification
- Bead-based ELISA
- SDS PAGE analysis
- Immunoprecipitation
- Protein Pull-down

**Catalogue antibodies features**

- Top quality antibodies
- Clones with highest reputation
- Key protein targets
- Skilled technical support

**Additional services**

- Primary and secondary Custom

**www.eurogentec.com**
CHOOSING AMONG OUR PRIMARY Abs

Eurogentec offers a range of primary antibodies which are best-sellers in the following categories:

- **Neuronal Class III beta-Tubulin**
- **5-Methyl-Cytosine**
- **5-Methyl-Cytosine Phospho**

For a complete list, visit our website: [www.eurogentec.com](http://www.eurogentec.com)

PROTEIN A−CONJUGATES

Eurogentec has developed an excellent alternative to dye labeled secondary antibodies based on the ability of Protein A to bind the FC region of most IgGs (for affinity information see p. 24). The range of universal detection reagents allows the detection via streptavidin labels, or provides a super bright signal thanks to the HiLyte™ Fluor conjugates. For multiple detection applications, one can detect multiple targets with high sensitivity.

**Hyaluronan (HA) Antibodies**

- HA11 Tag
- Beta-Amyloid 1-42
- Beta-Amyloid 1-16
- HA.11 Tag

**Neuronal Class III beta-Tubulin**

- [www.eurogentec.com](http://www.eurogentec.com)

**5-Methyl-Cytosine**

- [www.eurogentec.com](http://www.eurogentec.com)

**5-Methyl-Cytosine Phospho**

- [www.eurogentec.com](http://www.eurogentec.com)

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**PROTEIN A−CONJUGATES**

- [www.eurogentec.com](http://www.eurogentec.com)
Antigens should be shipped along with a copy of the order form. Should you be shipping additional antigen, ensure the volume is not exceeding the authorised amount per injection. For this reason, we ask our customers to cut out the band of interest and to aliquot it in separate tubes for each injection. The antigen tubes can be shipped at room temperature. The standard Coomassie and Coomassie-like staining procedure can be used since the Coomassie staining dyes do not interfere with the antibody evolution. However, silver stain is not allowed. The band should just be washed briefly but thoroughly in water to remove acetic acid and methanol residues, and then cut into injection pieces, and aliquoted wet into safe lock tubes to avoid drying. The gel must not be dried or lyophilised, because this would make the fragmentation before injection more difficult.

**SDS-PAGE**

For antibody productions with SDS-PAGE gel fragments, we advise our customers to cut out the band of interest and to aliquot it in separate tubes for each injection. The antigen tubes can be shipped at room temperature. The standard Coomassie and Coomassie-like staining procedure can be used since the Coomassie staining dyes do not interfere with the antibody evolution. However, silver stain is not allowed. The band should just be washed briefly but thoroughly in water to remove acetic acid and methanol residues, and then cut into injection pieces, and aliquoted wet into safe lock tubes to avoid drying. The gel must not be dried or lyophilised, because this would make the fragmentation before injection more difficult.

**Shipping address:**

EUGENTEC Immunisation Department, LIEEDE Science Park, Rue du Bois Saint-Jean, 4102 SERAING, Belgium

**How to provide my antigen:**

Antigens should be shipped along with a copy of the order form. Should you be shipping additional antigen, ensure the volume is not exceeding the authorised amount per injection. For this reason, we ask our customers to cut out the band of interest and to aliquot it in separate tubes for each injection. The antigen tubes can be shipped at room temperature. The standard Coomassie and Coomassie-like staining procedure can be used since the Coomassie staining dyes do not interfere with the antibody evolution. However, silver stain is not allowed. The band should just be washed briefly but thoroughly in water to remove acetic acid and methanol residues, and then cut into injection pieces, and aliquoted wet into safe lock tubes to avoid drying. The gel must not be dried or lyophilised, because this would make the fragmentation before injection more difficult.

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**Note:** Please note that the molecular mass of haptens is usually too low to elicit an immune response. Therefore, they should be provided under a format with a higher MM if Ab production is requested (e.g. coupled to a carrier).

**In solution**

You can send us your antigen in solution on dry ice. We recommend limiting as far as possible the use of detergents and aggressive chemicals such as acetic acid, guanidine hydrochloride, heavy metals and other agents that are toxic to the host animal. It is possible to immunise animals with an antigen solution containing BM-urea, but this is more powerful for the rabbits. For this reason, we ask our customers to send us the antigen as concentrated as possible so that we can dilute the solution before injection in order to decrease the final urea concentration. Antigens in solution should be sent in a volume not exceeding the authorised amount per injection.

For ex:

- Rabbit: 500 µL/injection
- Rat: 250 µL/injection
- Guinea Pig: 250 µL/injection
- Mouse: 150 µL/injection
- Hen: 500 µL/injection
- Goat/Sheep: 100 µL/injection

**Antigen amount**

Injection amounts per rabbits depend on the antigen weight: 100µg per injection for < 18 – 20 kDa proteins*, 200µg per injection for > 18 – 20 kDa proteins.

Injection amounts for other hosts are listed in the table beside.

**Antigen format**

**Typical bleed volumes in the most common hosts**

<table>
<thead>
<tr>
<th>Origin of Immunoglobulins</th>
<th>Protein A</th>
<th>Protein G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Rat</td>
<td>-</td>
<td>+++</td>
</tr>
<tr>
<td>Guinea pig (IgY)</td>
<td>+++</td>
<td>-</td>
</tr>
<tr>
<td>Rabbit</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Goat</td>
<td>-</td>
<td>+++</td>
</tr>
<tr>
<td>Sheep</td>
<td>+++</td>
<td>-</td>
</tr>
<tr>
<td>Pig</td>
<td>-</td>
<td>+++</td>
</tr>
<tr>
<td>Chicken (IgY)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Typical bleed volumes in the most common hosts**

* On average, depending on the injection volume.
How to order

On line

Custom antibody

Online forms are available on our website:
https://www.eurogentec.com/custom-antibody-production-order-forms.html

1. Fill in the request form
2. Receive a quotation (and recommendations for the peptide sequence in case of anti-peptide production)
3. Complete and send the order form (you will receive the link by email with your quotation)
4. Receive a confirmation email (at this time, your immunisation will start)

For a general discussion about your project or a tailor-made quotation, please contact your sales representative or send your request to proteomics.services@eurogentec.com

For monoclonal antibodies programme, please contact:
monoclonals@eurogentec.com

Catalogue antibody

The Eurogentec Ordering System (EOS) is the simplest and easiest way to place your orders. Otherwise you can send an e-mail to order@eurogentec.com, or contact your sales representative.

Shipping fees

Custom polyclonal antibodies are shipped on dry ice. Custom monoclonal antibodies are shipped on dry ice or can be lyophilised and sent at room temperature.

Catalogue antibodies are usually shipped on dry ice. See our detailed shipping conditions on http://www.eurogentec.com/shipping-conditions.html

An animal welfare

Our animal facilities are governed by stringent practices:

• BELAC, one of the most stringent ethical legislations in force.
• Facilities are cleaned 3-5 times a week with cleaning agents free from formaldehyde.
• Flow of traffic from the cleanest to the dirtiest area prevents cross-contamination.
• Daily observation of sentinel animals and health status are monitored as per FELASA recommendations.
• Each Animal has a balanced diet and the food is quality controlled.
• Temperature, pressure, relative humidity and ventilation systems (100 % HEPA filtered air for SPF animals) are recorded in real time.
• 24 hour staffed facilities with an intrusion alarm system, armoured doors and surveillance camera ensure absolute security.

Animal welfare is our priority, that’s why we strictly follow and even exceed the sternest ethical legislation in force. We respect the 3Rs philosophy. Reduce the number of animals used. Refine space to improve animal comfort. Replace animal use by other techniques whenever possible. With this aim, we can produce polyclonal antibodies from chicken eggs, and produce monoclonal antibodies exclusively in vitro.

Related products

Catalogue & custom peptides
iD gels
iD Molecular Weight Standards
iD Western 1H Detection Kits
Takyon™ qPCR kits
Test your free sample, visit www.eurogentec.com/qpcr-takyon.html

Custom genes
Custom proteins
iD SensoLyte® assays kits

Large scale antibody projects

A tailored programme has an average yield of 10-20 mg specific rabbit Ab.

Species
Mean housing capacity
Rabbits 15000*
Guinea pigs 300*
Hamsters 200*
Rats 200*
Mice 400*

*Can be easily adapted in large customer’s requests.

Trademarks and labels

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Eurogentec® is a registered trademark of Kaneka Eurogentec S.A.
HiLyte™ is a trademark of Anaspec, Inc.

License statements

HiLyte™ Fluor dyes
Use of this product is covered by one or more of the following US patents owned by Anaspec, Inc.: USP 7,465,810, USP 7,754,893, USP 7,820,783, USP 8,258,292, and divisionals, continuations, continuations-in-part, reissues, substiutes, and extensions thereof. The purchaser of this product covers the buyer a limited non-exclusive, non-transferable right to use the unpurchased product for the purchaser’s own internal research. No other license is granted to the buyer whether expressly, by implication, by estoppel or otherwise. In particular, the purchaser of this product does not include any car, any right or license to use, sell, develop, or otherwise exploit this product commercially, as well as any right to use the purchased components of the product for any other purposes, including without limitation, provision of services to a third party, generation of commercial databases, or clinical diagnosis or therapeutics. This product is for research use only. For information on purchasing a license to this product for purposes other than research, contact licensing@eurogentec.com.

January 2018