

# Experience the Mabtech **ELISA**

Mabtech provides well-designed ELISA kits for specific, sensitive, and robust quantification of analytes in solution. A comprehensive selection of ELISA kits is available for the quantification of cytokines, immunoglobulins, and apolipoproteins. For example, we offer a broad range of ELISAs to detect the cytokine IFN- $\gamma$  for more than 10 different species.



## ELISA kits

- Based on highly specific monoclonal antibody (mAb) pairs selected for optimal performance
- Detection of cytokines, immunoglobulins and apolipoproteins
- Available for more than 10 different species
- Suitable for research use
- Excellent technical support (mabtech@mabtech.com)



## ELISA analytes

Mabtech offers ELISA kits for a wide range of cytokines, immunoglobulins, and apolipoproteins.

### Cytokines

The ELISA kits are based on our platform of optimized mAb pairs. ELISA kits are available for detection of a wide range of cytokines across many species. In particular, the **IFN- $\gamma$**  ELISA is available for more than 10 different species.

### Immunoglobulins

Mabtech provides kits for detection of **IgG, IgA, IgM, and IgE**. The human and mouse Ig kits feature ALP-labeled detection antibodies for a faster assay procedure. We also produce antibodies suitable for use in antigen-specific ELISAs, including antibodies specific for human and mouse **Ig subclasses**.

### Apolipoproteins

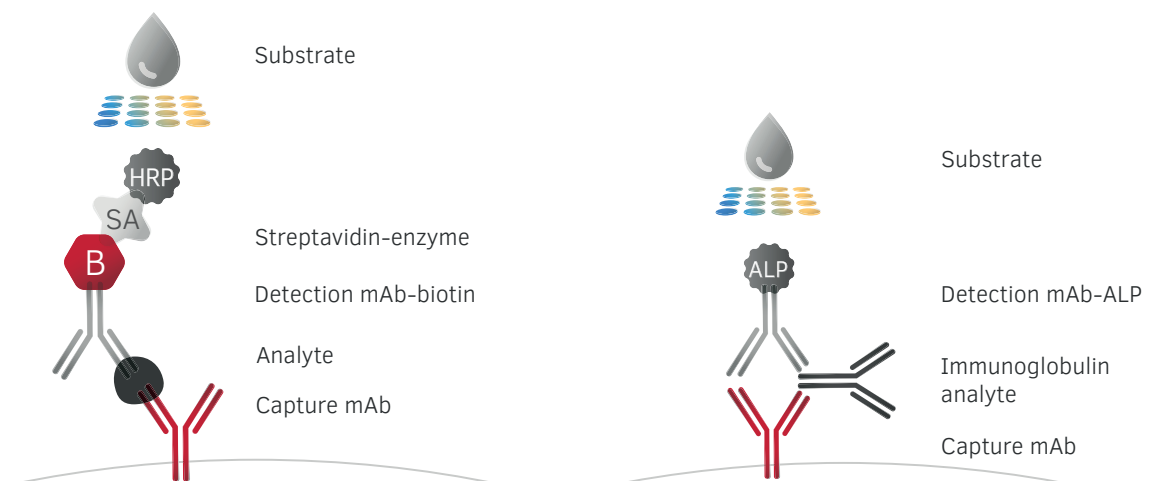
Apolipoproteins can be detected with our optimized kits for human **ApoA1, ApoB, ApoD, ApoE, ApoH, ApoJ, and ApoM**. The ELISA kits are suitable for analysis of cell supernatants and serum/plasma samples.



## Sandwich ELISA principle

The ELISA technique enables sensitive quantification of analytes in solution. Combining the use of well-defined antibodies and reagents with a simple and versatile procedure, the assay provides a highly sensitive and specific method for measuring almost any analyte.

In a sandwich ELISA, mAbs specific for the analyte of interest are used to coat ELISA plates. Samples are then added in parallel with a serially diluted standard with known analyte concentrations. Detection of bound analyte is achieved by the addition of a biotinylated detection mAb followed by streptavidin-conjugated enzyme (ALP or HRP) and finally an appropriate colorimetric substrate. The resultant color change is directly proportional to the amount of analyte present in the sample and can be quantified using an ELISA reader. Detection mAbs directly conjugated to an enzyme may also be used.

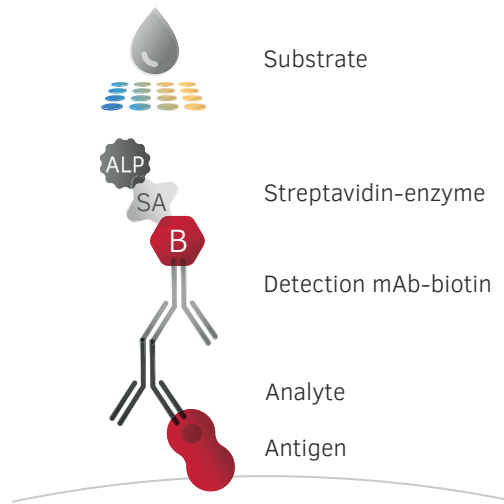


Schematic illustrations of a cytokine/apolipoprotein (left) and immunoglobulin (right) sandwich ELISA.

## Antigen-specific ELISA

Mabtech provides mAbs that can be used to detect antigen-specific IgG, IgA, IgM, and IgE. The presence of such antibodies in a sample can be demonstrated using an antigen-specific ELISA.

In an antigen-specific ELISA, the antigen of interest is used to coat the ELISA plate. Antigen-specific antibodies in a sample will bind the antigen and can be revealed by adding a secondary anti-Ig detection antibody. This approach is commonly used, for example, in diagnostic assays with microbial antigens to confirm infections. The antigen-specific ELISA is also suitable for evaluating immune responses in vaccinated individuals or immunized animals.



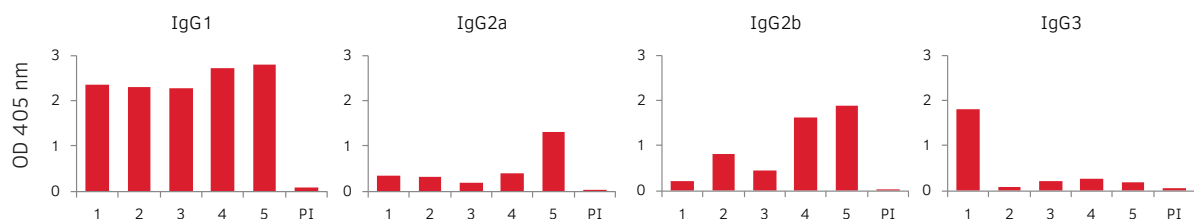
Schematic illustration of an antigen-specific ELISA.

## Ig subclass reagents

Mabtech supplies mAbs specific for human and mouse Ig subclasses. These antibodies can be used in ELISA to determine Ig subclasses in a sample, thus providing detailed characterization of an immune response.

Subclass-specific detection antibodies can be used in order to obtain further information about the type of antigen-specific Ig response, as shown in the image below. This is a valuable approach both in research and in clinical assessments of, for example, immunodeficiencies characterized by production of a low level of one or more Ig subclasses.

Subclass-specific mAbs are available for human **IgA1**, **IgG1**, **IgG2**, **IgG3**, and **IgG4** and for mouse **IgG1**, **IgG2a**, **IgG2b**, and **IgG3**.



Antigen-specific subclass ELISA. Antigen-specific IgG1, IgG2a, IgG2b, and IgG3 antibodies in serum from five immunized mice. PI: pre-immune.

## Mabtech ELISA kits

Our platform of high-quality mAbs enables research on your own terms. We supply ELISA kits for research use in two formats: adaptable ELISA development kits and complete ELISA<sup>PRO</sup> kits including all that is needed for a straightforward assay. Our ELISA<sup>PRO</sup> kits feature pre-coated strip plates for reduced assay time and minimal assay variability.

### ELISA development kit



- Capture mAb
- Biotinylated detection mAb
- ELISA standard
- Streptavidin–ALP/HRP

### ELISA<sup>PRO</sup> kit



- Pre-coated 96-well strip plates
- Biotinylated detection mAb
- ELISA standard
- Streptavidin–HRP
- TMB substrate and stop solution
- Buffers

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## Supplementary Products

Several supplementary products are available to complement our kits and antibodies, ranging from Streptavidin–enzyme conjugates to ready-to-use ELISA substrates and ELISA buffers. The ELISA diluent, the Apo ELISA buffer, and the Assay buffer have been developed for use with Mabtech ELISAs and are able to prevent heterophilic antibody interference during analysis of serum/plasma samples.

PRODUCT	SIZE	CODE
<b>Streptavidin-enzyme conjugates</b>		
Streptavidin-ALP	1 ml	3310-8
Streptavidin-HRP	1 ml	3310-9
<b>Ready-to-use ELISA substrates</b>		
TMB ELISA Substrate	120 ml	3652-F10
pNPP ELISA Substrate	120 ml	3652-p10
<b>ELISA buffers</b>		
Ready-to-use ELISA diluent	2 x 120 ml	3652-D2
Ready-to-use Assay buffer	2 x 120 ml	3652-J2
Apo ELISA buffer concentrate 5x	2 x 120 ml	3652-M2

## Mabtech ELISA kits

### Human

ANALYTE	AVAILABLE ELISA KIT FORMATS
ApoA1	Development, Pro
ApoB	Development, Pro
ApoD	Pro
ApoE	Development, Pro
ApoH	Pro
ApoJ/Clusterin	Pro
ApoM	Pro
GM-CSF	Development, Pro
Granzyme A	Development
Granzyme B	Development
IFN- $\alpha$ 2	Development
IFN- $\alpha$ pan	Development, Pro
IFN- $\gamma$	Development, Pro
IgA	Development
IgE	Development, Pro
IgG	Development
IgM	Development
IL-1 $\beta$	Development, Pro
IL-2	Development, Pro
IL-4	Development, Pro
IL-5	Development, Pro
IL-6	Development, Pro
IL-8 (CXCL8)	Development
IL-10	Development, Pro
IL-12 (p70)	Development, Pro
IL-12/-23 (p40)	Development, Pro
IL-13	Development, Pro
IL-17A	Development, Pro
IL-21	Development
IL-22	Development
IL-23	Development, Pro
IL-29 (IFN- $\lambda$ 1)	Development
IL-31	Development
Perforin	Development, Pro
TGF- $\beta$ 1 (Latent TGF- $\beta$ 1)	Development, Pro
Thioredoxin-1	Development, Pro
TNF- $\alpha$	Development

### Mouse

ApoA1	Pro
IFN- $\gamma$	Development, Pro
IgA	Development
IgE	Development
IgEa	Development
IgG	Development
IgM	Development
IL-2	Development, Pro
IL-4	Development, Pro
IL-5	Development, Pro
IL-6	Development
IL-10	Development
IL-12 (p70)	Development, Pro
IL-12/-23 (p40)	Development, Pro
IL-17A	Development
TNF- $\alpha$	Development, Pro

### Monkey

ANALYTE	AVAILABLE ELISA KIT FORMATS
ApoA1	Development, Pro
ApoB	Development, Pro
ApoE	Development
ApoH	Pro
GM-CSF	Development, Pro
IFN- $\alpha$ pan	Development, Pro
IFN- $\gamma$	Development, Pro
IgA	Development
IgG	Development
IgM	Development
IL-2	Development, Pro
IL-4	Development, Pro
IL-5	Development, Pro
IL-6	Development, Pro
IL-8 (CXCL8)	Development
IL-12/-23 (p40)	Development, Pro
IL-13	Development
IL-17A	Development
IL-21	Development
IL-23	Development, Pro
Perforin	Development, Pro
TGF- $\beta$ 1 (Latent TGF- $\beta$ 1)	Development, Pro
TNF- $\alpha$	Development

### Rat

IFN- $\gamma$	Development
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### Rabbit

IFN- $\gamma$	Development
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### Cow

IFN- $\gamma$	Development
IL-2	Development
IL-4	Development
IL-8 (CXCL8)	Development

### Horse

IFN- $\gamma$	Development
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### Sheep

IFN- $\gamma$	Development
IL-4	Development

### Pig

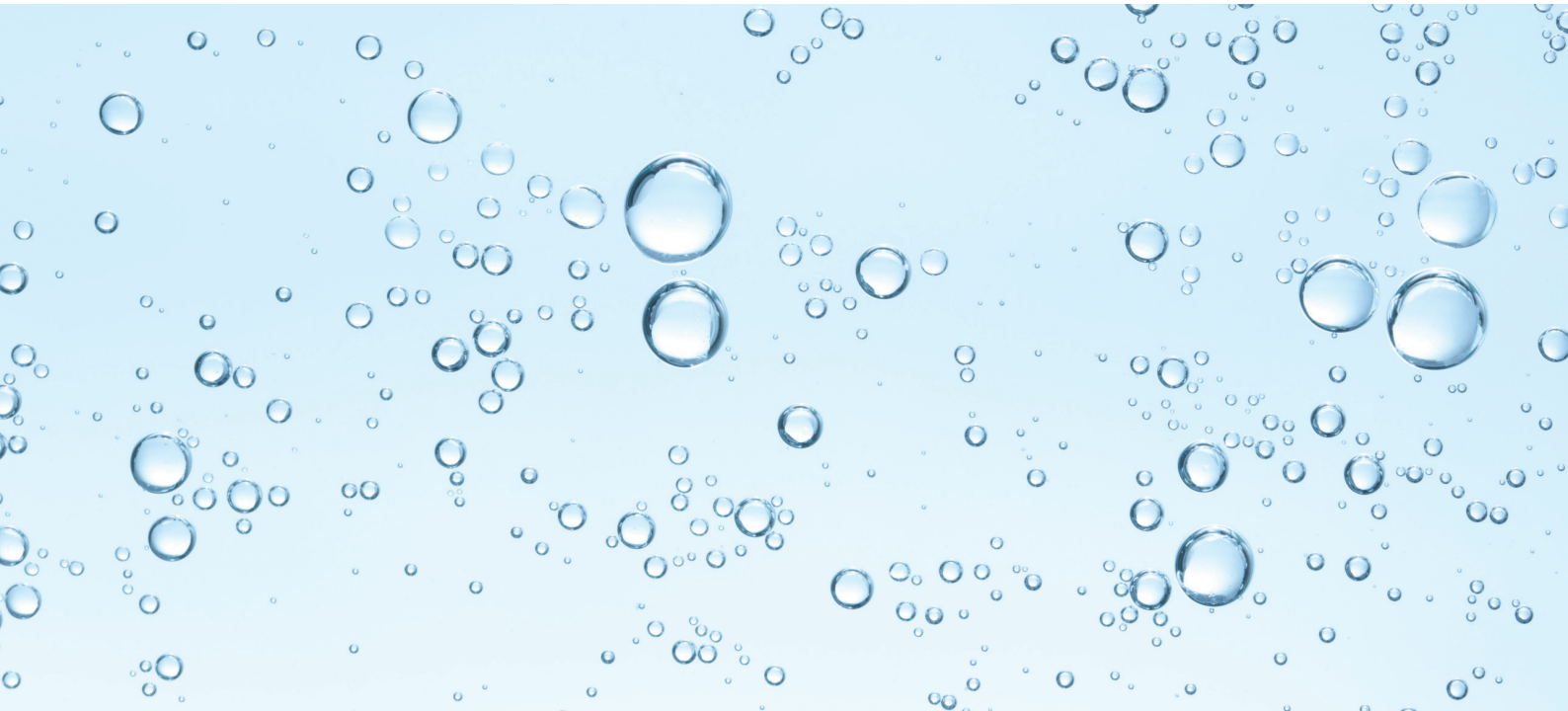
IFN- $\gamma$	Development
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### Dog

IFN- $\gamma$	Development
IL-8 (CXCL8)	Development

### Ferret

IFN- $\gamma$	Development
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## About Mabtech

Mabtech AB is a privately owned Swedish biotech company founded in 1986. We develop, manufacture, and market high quality monoclonal antibodies and kits suitable for ELISA, ELISpot, and FluoroSpot. For many years Mabtech has been a world leader in the field of ELISpot as a result of our strong research focus and continued effort to optimize this technique. Close international collaborations with both academia and industry are leading the way for future developments that help the research community achieve optimal results.