



# **Product Portfolio & Service**



web abclonal.co.uk



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# **COMPANY PROFILE**

ABclonal is an innovative growth company with the aim to provide reliable and cost-effective products and services for both basic and translational research in the cutting edges of biomedical science.

Innovation is our DNA.ABclonal has established R&D centers in the worldwide with different focuses to support technical innovation and product development for protein science and molecular biology. We always carefully listen to the opinions and feedback from talented scientists across the globe, quickly translate their needs into our product development pipeline, dedicating to develop the valuable research tools based on state-of-the-art technologies to meet the needs of innovation in a timely manner.

Antibody | Protein | ELISA Kits | Enzyme | NGS | Service

## **DEVELOPMENT HISTORY**

# 2021-2022

Aimed to provide integrate solutions for biomedical research with new introduced product lines (lab supplies,high-throughput processing instruments, lab automation system,etc)

## 2020

During the pandemic, provides featured raw mater als for COVID-19 diagnosis, including antibodies, roteins, and malecular reagents.

## 2018-2019

Accelerating our R&D in recombinant monodonal antibodies based on proprietary single B cell based antibody development platform SMabTM, and innovative genomic research products based on molecular enzyme and NGS reagents development platform.

# 2016-2017

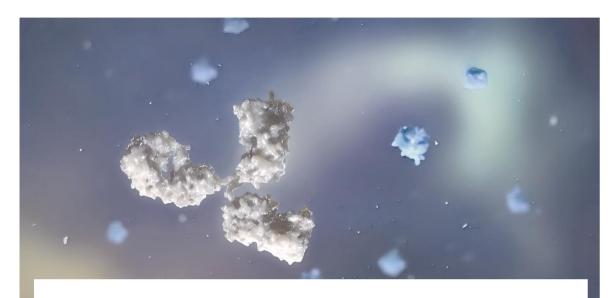
Established multiple R&D Centers with different focuses to support technical innovation and product development.

# 2012-2015

Provides variety of custom services including antibody development, immunoassay development, multiplex assay, protein expression and purification, etc.

## 2011

## **Antibodies**



ABclonal's antibody portfolio covers major research areas, such as cell biology, cancer, immunology & inflammation, epigenetics, metabolism & endocrinology, neuroscience, stem cells, cardiovascular, post-translational modification of proteins, etc. ABclonal also provides high-quality recombinant rabbit monoclonal antibodies to in vitro diagnostic and pharmaceutical companies worldwide. Since 2018, ABclonal has launched the "10,000 Rabbit Monoclonal Antibody Project", which is to develop 10,000+ targets of high-quality recombinant rabbit mAb, to upgrade the product portfolio and accelerate the development of life science research.

ISO9001 & ISO13485 quality management system certified



- Products covering scientific research & in vitro diagnostics & drug discovery
- The world's leading SMab® recombinant rabbit monoclonal antibody development platform
- Advanced antibody screening and validation platform, ensuring the reproducibility of antibodies

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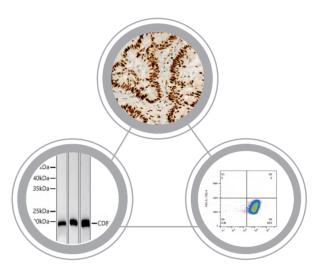
Guarantee professional pre- and post-sale service





## **Featured Product Series**

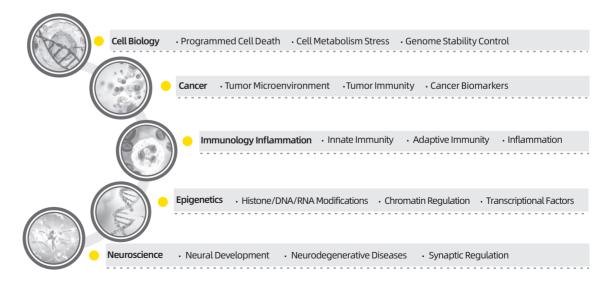
#### PathoQ® IHC Pathology Antibody



PolymAb® Monoclonal Antibody Mix

**ABflo® Flow Cytometry Antibody** 

#### **Featured Research Areas**

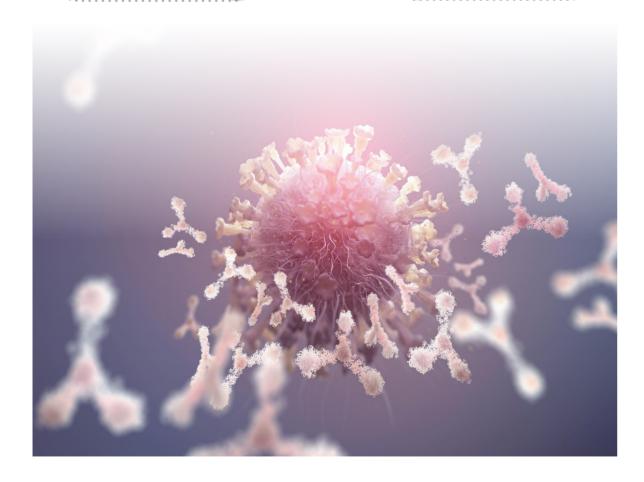


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#### **Featured Validation Strategies**

ChIP-seq Validation Platform Cut&Tag Validation Platform Combining ChIP and Optimized and innovative high-throughput sequencing epigenetics research technique, technology to deeply analyze complement with ChIP-seq. the regulatory network of DNA-protein interaction. **KO Validation Platform** Confocal Microscopy Validation Platform Abundant KO samples ensure the antibody specificity and High-resolution microscopic reproducibility. imaging technology, a powerful tool for protein subcellular

localization research.



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# Recombinant Proteins

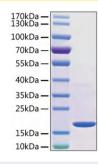


# Tumor Immunotherapy Targets A wide selection of recombinant tumor immunotherapy targets for antibody production and screening. CAR-T Cell Therapy (RUO) Popular targets and related cytokines with high purity, good affinity and low endotoxin. Cytokines and Cytokines for cell culture (stem cell culture, organoids culture, immune cell culture, etc), we offer a variety of tags and species for studying cell biology.

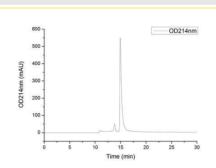
#### **Key Features**

1 Purity: >95%, by SDS-PAGE with Coomassie® Blue staining. >90% by HPLC

#### RP00001 | Active Recombinant Human TNF-alpha Protein



15kDa — 10kDa — Active Recombinant Human TNF-alpha Protein was determined by SDS-PAGE with Coomassie



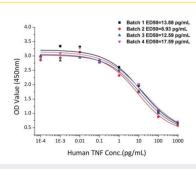
The purity of Human TNF-alpha Protein (Cat.RP00001) was greater than 90% as determined by SEC-HPLC.

- 2 Concentration: Measured by BCA or Nanodrop (A280)
- 3 Endotoxin: < 0.1 EU/μg by the LAL method.

Blue, showing a band at 17 kDa.

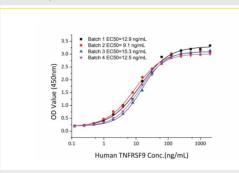
- 4 Formulation: Lyophilized from a 0.22 μm filtered solution in PBS or Tris-HCl and NaCl.
- 5 Lot-to-lot Consistency

#### RP00001 | Active Recombinant Human TNF-alpha Protein



Recombinant Human TNF-alpha induces cytotoxicity in the L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED50 for this effect is typically 8.93-17.59 pg/mL.

#### RP00276| Recombinant Human TNFRSF9 Protein



Immobilized Human TNFSF9 at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human TNFRSF9 with a linear range of 9.1-15.3  $\eta$ mL.

## ELISA Kits



ABclonal has more than ten years of experience in ELISA kit production and offers over 4000 high-quality ELISA kits covering more than 3000 targets. Adhering to the principle of quality first, ABclonal uses KO-validated recombinant rabbit monoclonal antibodies to screen antibody pairs used in the ELISA kits, which ensures the specificity and sensitivity of our products. ABclonal has a wide range of products, including sandwich ELISA, competitive ELISA, high-sensitivity ELISA, uncoated ELISA, one-step ELISA, etc, to meet your cutting-edge research needs.



#### Research areas

Immunology and inflammation, endocrinology and metabolism, cancer, neuroscience, stem cells, apoptosis, autophagy, cardiovascular, reproduction and development, etc.



#### Species

Human, mouse, rat, cow, chicken, pig, rabbit, dog, horse, fish, universal



#### **Key features**

Consistent Performance.
Good sensitivity, specificity and reproducibility

Validated for a wide range of sample types

#### **ABclonal ELISA Formats**

#### Sandwich ELISA and Competitive ELISA

- · Streptavidin-biotin signal amplification system
- · Fully validated & ready-to-use
- · Cover 3000+ targets
- · Highly reproducible

#### High-sensitivity ELISA

- · KO validated antibody pairs
- · Fully validated & ready-to-use

#### Uncoated ELISA

- · Contain basic components
- · Validated antibody pairs
- · Lower cost per data point

#### One-step ELISA

- · Simplified protocol
- · Fast & efficient
- · High accuracy & highreproducibility

## Antibody Pairs

· Single B-cell based mAb development platform

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- · High specificity & high affinity
- · Strict in-house validated
- · Lot-to-lot consistency



# Molecular Biology Reagents & NGS Kits



ABclonal aims to provide professional and reliable products and services to life sciences researchers, in vitro diagnostic and pharmaceutical companies. The main product lines include molecular biology reagents, molecular diagnostic raw materials, and NGS library preparation kit. To date, ABclonal has developed more than 200 molecular biology products and is able to provide various personalized services such as product consultation, technical training, and system optimization.

#### **Molecular Diagnostic Raw Materials**



Sensitivity



Specificity



**Stability** 

ABclonal provides various purified enzymes and optimized reagents such as sample preparation reagents, polymerases, antibodies, UDG, reverse transcriptase, RNase inhibitor-proteinase K, and high purity nucleotides, covering a wide range of molecular diagnostic applications including qPCR, RT-qPCR, and NGS. ABclonal's products have been verified in all standard applications and have passed strict QC test which ensures stable and reliable quality. From its inception, ABclonal has focused on developing enzymes with unique properties and has accumulated an impressive inventory of novel molecular diagnostics enzymes to meet a wide variety of clinical and research needs.

#### qPCR Mix

- · One-step RT qPCR Mix
- · Probe qPCR Reagent

#### Raw Material

- · Taq DNA polymerase
- · Reverse Transcriptase
- Taq Antibody
- · RNase Inhibitor
- · Uracil-DNA Glycosylase
  - ase · dNTPs

#### **NGS Library Prep**



#### **Diversity**



#### **Flexibility**

ABclonal's NGS product portfolio includes various DNA and RNA library preparation kits and corresponding sequencing adapters for Illumina and MGI sequencing platforms. ABclonal's NGS kits can be used for resequencing, methylation sequencing, ChIP-seq, mRNA sequencing, whole transcriptome sequencing, small RNA sequencing, etc. Our damaged DNA repair module (DDRE) technology and single-stranded DNA (ssDNA) connection technology can significantly improve the success rate of library preparation for clinical samples such as FFPE and cf/ctDNA. All ABclonal NGS library prep reagents are modularly designed, which could be combined flexibly according to the needs.

#### **DNA Library Prep**

- DNA Library Prep Kits(Rapid series + FS)
- DNA Library Prep Modules

#### Adapters

- · Adapters for DNA/RNA Library Prep
- · Adapters for RNA Library Prep

#### **RNA Library Prep**

- · RNA Library Prep Kits
- RNA Library Prep Modules

#### **NGS Related Products**

- FFPE QC Kits
- · DNA Clean Beads

#### PRODUCT PORTFOLIO & SERVICE

#### **Molecular Biology Reagents**



#### Universal



#### High fidelity



#### Cost-effective

ABclonal's molecular biology reagents cover common molecular biology experiments such as PCR, reverse transcription, fluorescence quantification, vector construction, nucleic acid extraction, etc. All the products have passed strict QC test and application verification, and the product quality is stable and reliable.

#### PCR

Universal PCR

**Reverse Transcription** 

· Reverse Transcription Master Mix

· Multifunctional Reverse Transcription Kit

. Reverse Transcription Related Products

- Hot Start PCR
- Conventional PCR
   PCR related products
- · High-Fidelity PCR

DNA Ligases

Ligase

qPCR

Dye-based qPCR

· One Step RT-qPCR

· Probe-based qPCR

RNA Ligases

#### **Nucleic Acid Electrophoresis**

- DNA Ladder / Marker
- Nucleic Acid Stain
- Agarose

## **Nucleic Acid Extraction**

- · Plasmid Extraction
- · Recovery

#### **Nucleic Acid Modifying Enzymes**

- DNA Manipulation
- DNA kinase
- · DNA repair and nucleases

#### Endonuclease

- · Restriction Enzymes
- Nickase

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## Custom Services

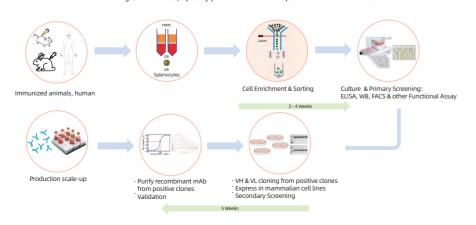


ABclonal has over 10 years of experience in producing antibodies for research and drug discovery needs. We offer complete custom services from antigen design and synthesis to antibody characterization and have provided services to life science researchers, IVD, and pharmaceutical companies worldwide. To date, our expert scientists have successfully produced more than 1,200 rabbit monoclonal antibodies and 15,000 polyclonal antibodies. Whether your needs are small scale research or large scale manufacture, our team will work with you to create the antibodies that fit your experimental needs.

#### **Antibody Development Service**

#### SMab<sup>®</sup> Platform

SMab: Single cell-based, Speedy platform delivers Superior mAb to customers.



## Service Highlights

- Free Antigen Design
- · Broad Range of Species rabbit, mouse, and llama
- Fast Turnaround Time total 13-18 weeks
- Multiple Applications- IF, IHC, ChIP, ELISA, FC, IP and WB

## Service Categories

#### Single B cell mAb discovery

- Rabbit monoclonal antibody
- · Llama nanobody
- Anti-idiotype antibody
- · Human monoclonal antibody

#### Antibody engineering

- · Antibody humanization
- · ScFv design and engineering
- Fc Swapping
- · Bi-specific antibody design

## Antigen design and immunization

- · Antigen design and expression
- VLP immunization
- Cell immunization
- DNA/RNA immunization

#### Other services

- · Recombinant mAb manufactureVLP Stable
- · cell line construction
- · Affinity ranking and measurement
- Hybridoma sequencing



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## **Immunoassay Development Service**

ABclonal has a highly experienced team of scientists and project managers that have successfully developed many in vitro diagnosis ELISA kits and antibody pairs. Operating in an ISO 9001-certified facility, we employ strict quality control standards and procedures to provide sandwich ELISA, direct or indirect competitive ELISA, and other formats of ELISA kits development services.

#### SERVICE WORKFLOW



#### 3.Other Services

## Protein expression services

- · Prokaryotic expression system
- Insect expression system
- Mammalian expression system

## Peptide services

- Peptide synthesis
- · Peptide library