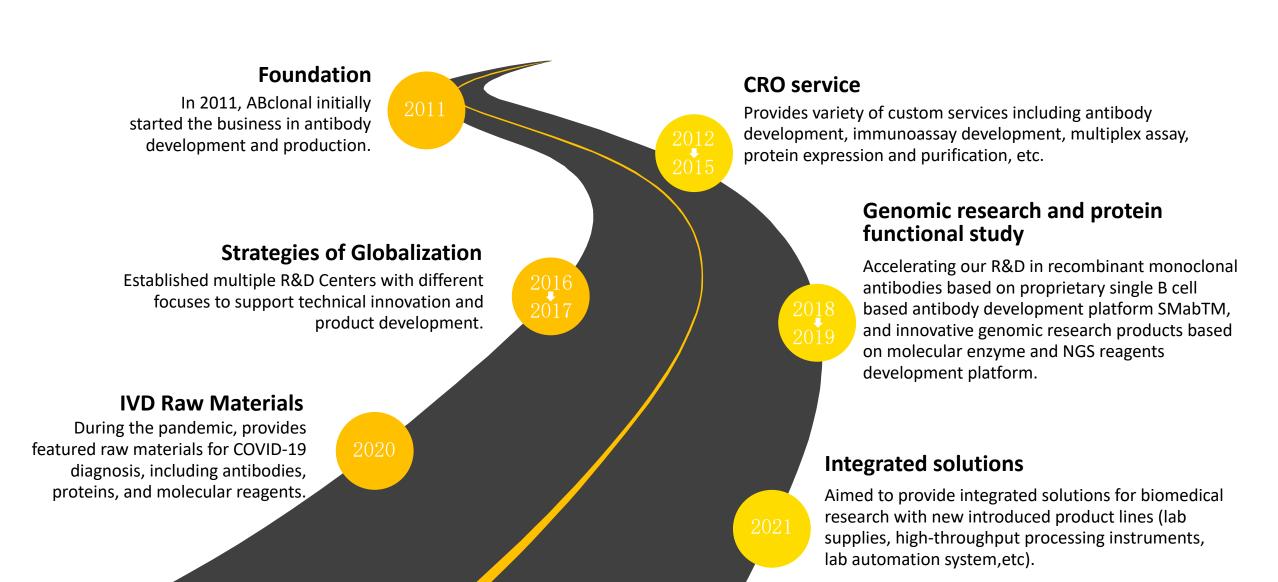


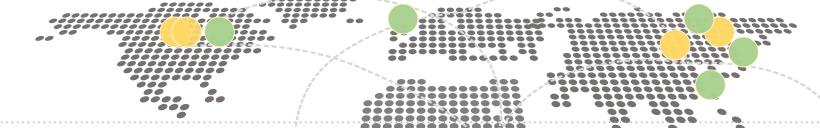
ABclonal History and Backgound





Global Distribution





Global R&D Centers

Boston

Molecular enzyme R&D +Immune Technology

Shanghai

Molecular enzyme / NGS R&D

Wuhan

Antibody R&D + Manufacturing Facility

Global Market

U.S. Euro

Boston Office Swansea Office

Global Distributors:

50+

China Market

Direct Sales:

Shanghai, Beijing, Wuhan, Nanjing, Hangzhou, Chengdu, Chongqin, Xiamen, Qingdao,

Xi`an, Guangzhou, etc











Asia

Tokyo Office

Taipei Office





Boston R&D

Shanghai R&D

Wuhan R&D

Boston Office

Swansea Office

Taipei Office

Tokyo Office

R&D Platforms



Our talented R&D team and keep high investments to our core technical platforms, supporting product development and technical innovation.



Dapeng Sun, PhD (NGS)

- PhD in Biochemistry
- New England BiolabsShanghai R&D Center,General Manager
- ImmunoGen Inc., Scientist
- MIT, Postdoctoral Associate



Zhenyu Zhu, PhD (Molecular Enzyme)

- PhD in Biochemistry
- New England Biolabs, Senior Scientist
- New England Biolabs, Staff Scientist



Yang Lou, PhD (CRO)

- PhD in Genetics
- UMASS Medical School, Postdoctoral
- Co-founder of Yurogen Biosystems
- Director of ABclonal Global CRO Service



Hai Wu, PhD (Antibodies)

- PhD in Genetics
- UMASS Medical School, Postdoctoral
- Co-founder of YurogenBiosystems
- CTO of ABclonal Antibody Division

Overview of Our Business



Integrated solution provider for biomedical research

1

Antibodies and Immunoassays

- Research Antibodies
- Diagnostic Antibodies
- ELISA Kits
- Matched Antibody Pairs

2

Genomic Research Reagents

- NGS Library Prep Kits
- Gene Cloning Reagents
- Molecular Enzymes
- Proteases

3

CRO services

- Antibody Development
- Recombinant Protein
- Antibody Pair Screening
- Immunoassay Development

4

Instruments and Consumables

- Laboratory Supplies
- Multiplex Protein Profiler
- Affinity MeasurementEquipment
- Consumables





Reagents



ELISA Kit



3000+ ELISA kit / Multiplex assay kit

Protein



750+ Protein

- ◆CD antigen
- ◆Fc & Fc receptor
- ◆Immune checkpoint
- ◆Cytokines &
 Cytokine receptor

Molecular Biology



100+ Molecular enzymes

- ◆RNA & DNA modifying enzymes
- ◆PCR & RT-PCR & qPCR & RT
- ◆Ligase &
 Endonuclease &
 seamless Cloning

NGS



Illumina / MGI platform

- ◆DNA library Prep Kit / Adaptor
- ◆RNA library
 Prep Kit /
 Adaptor

Antibodies



15000+ Antibodies

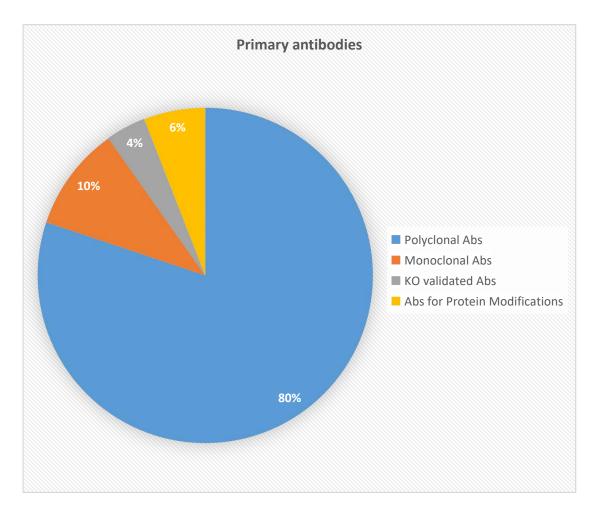
- ◆ Validated antibodies
- Rabbit mAb
- ◆ Rabbit pAb
- ◆ Mouse mAb
- ◆ Acetylated antibodies
- Methylated antibodies
- Phosphorylated antibodies
- Label Reference substance Secondary antibodies

Overview of Catalog Antibodies



Over **16,000** types of antibodies dominate most research fields, especially high-quality recombinant Rabbit mAb.

Note: All passed rigorous in-house validation and QC system, some antibodies already meet the needs of clinical diagnosis.





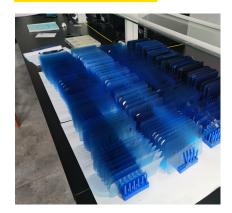
Key Features of Recombinant Rabbit mAb

- ◆High affinity
- ◆Superior specificity
- ◆Broad epitope recognition
- ◆Good recognition of small molecules and post-translational modification sites
- ◆Lot-to-lot consistency
- ◆ Multiple applications
- ◆Easy scale-up and engineering

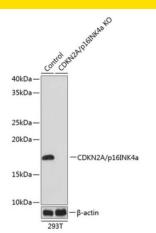
In-house Validation for Multiple Applications



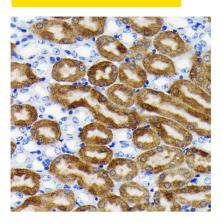
WB validation



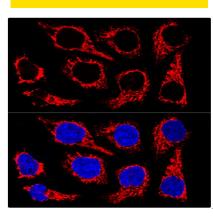
Validation with KO sample



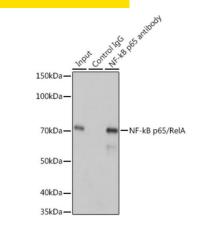
IHC validation



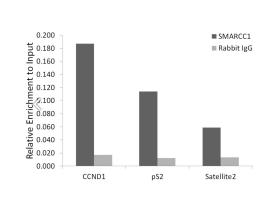
IF validation



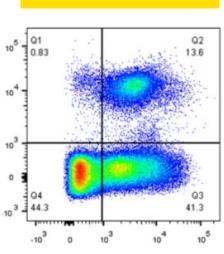
IP validation



CHIP validation



FC validation



Featured Products and Top-sellers Related Research Area



Cell Biology Research

- Cell type specific markers
- Organelle and subcellular markers
- ◆ Cell cycle and DNA damage
- ◆ Cell stress regulation
- Cytoskeleton

Cancer Research

- Cell adhesion molecules
- ◆ ECM & EMT
- Cancer metabolism
- Cancer biomarkers
- Cancer therapy targets

Immunology Research

- ◆ Immune phenotyping markers
- Rabbit mAb pairs for ELISA

Metabolism Research

Metabolic enzymes

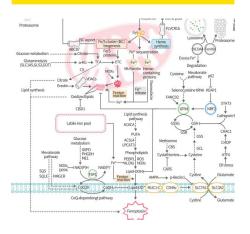
Neurology Research

- Neural lineage markers
- Biomarkers for neural disorders

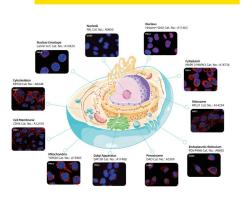
Epigenetic and Transcriptomics

- ◆ RNA biology (m6A, RBP)
- Transcriptional factors

Ferroptosis Research



Organelle Marker



Redox Regulation

Key Target		Cat. No.	Product Name	Applications	Reactivity
GPX4	0	A11243	GPX4 Rabbit mAb	WB,IP	Human,Mouse,Rat
FSP1/AJFM2		A12128	AIFM2 Rabbit pAb	WB	Human,Mouse,Rat
CISD1		A10317	CISD1 Rabbit pAb	WB,IHC	Human,Mouse,Rat
NQO1	- 0	A19586	NQO1 Rabbit mAb	WB,IHC,IP	Human,Mouse,Rat
HO=1	-	A19062	Heme Oxygenase 1 Rabbit mAb	WB,IHC	Human,Mouse,Rat
NFS1	-	A6688	NFS1 Rabbit pAb	WB,IHC,IF	Human,Mouse,Rat
		A2158	ALOX5 Polyclonal Antibody	WB,IHC,IF	Human,Mouse,Rat
LOXs		A16210	ALOX12B Rabbit pAb	WB	Human,Mouse,Rat
		A6865	ALOX158 Rabbit pAb	WB,IF	Human, Mouse, Rat
PEBP1		A12768	PEBP1 Rabbit mAb	WB	Human, Mouse, Ra
DPP4/CD26		A4252	CD26 Rabbit mAb	WB	Human, Mouse, Rat
		A8527	NOX1 Rabbit pAb	WB	Human,Mouse,Rat
NOXs	-	A19701	NDX2/CYBB/gp91phax Rabbit mAb	WB	Human, Mouse, Rat
		A11274	[KO Validated] NOX4 Rabbit pAb	WB,IHC	Human, Mouse, Rat

RNA Modification

m6A	A19841	N6-methyladenosine /m6A Rabbit mAb	Nucleotide Array DB IF	ALL
m6A	A17924	N6-methyladenosine / m6A Rabbit pAb	Nucleotide Array DB IP IF	ALL
ac4C	A18806	N4-acetylcytidine/ ac4C Rabbit pAb	DB	ALL
m5C	A16228	N5-Methylcytosine Rabbit mAb	DB IF MeDIP	ALL

Cancer Biomarkers in Pathology

A19657	[KO Validated] β-Catenin Rabbit mAb
A17910	alpha smooth muscle Actin Rabbit mAb
A19611	Androgen Receptor Rabbit mAb
A4923	ARG1 Rabbit mAb
A20221	Beta-Catenin Mouse mAb
A3734	Calponin Rabbit mAb
A19013	CD19 Rabbit mAb
A11436	CD23 Rabbit mAb
A19014	CD31/PECAM1 Rabbit mAb
A20228	CD31/PECAM1 Ralbbit mAb
A3661	CD35 Rabbit mAb
A19021	CD45 Rabbit mAb
A9560	CD7 Rabbit mAb
A19024	CD79a Rabbit mAb
A0663	CD8A Rabbit mAb
A18219	CDKN2A / p16lNK4a Mouse mAb
A18219	CDKN2A / p16INK4a Mouse mAb
A20222	CDX2 Rabbit mAb
A18131	CEACAM5 Mouse mAb
A19038	CyclinD1 Rabbit mAb
A19040	Cytokeratin 19 Rabbit mAb
A3149	E-Cadherin Mouse mAb
A19058	GFAP Rabbit mAb
A19641	Glutamine Synthetase Rabbit mAb
A20018	MKI67 mAb
A19081	MUC1 Rabbit mAb
A4767	MUC2 Rabbit mAb
A19652	p63 Rabbit mAb
A20217	PD-1 Mouse mAb

Antibody Library for Model organisms

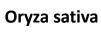


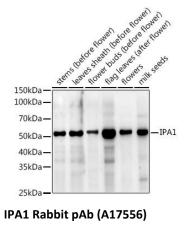
Specific antibodies for other model organisms (e.g. rice, corn, blue mustard, fruit flies, zebrafish) keep increasing and we have built antibody library for model organisms.

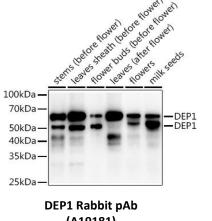
Note: Rice model organism antibody library is ready to proceed.

Туре	Examples		
Plant Arichiteture	SLR1, OsBZR1, OsRGA1, OsRGB1, NAL1, GID1, OsGSR1/GW6, IPA/OsSPL14, OsDLT, TE/TAD1, LIC1, DEP1, MOC1, SD1		
Heading Date	DTH8, Ehd1, EL1/Hd16, Ghd7.1/DTH7, Hd1, Hd3a/OsFT, OsELF3, OsHAL3, OsMADS1, OsMADS15, Ghd7, OsFD1,OsGI		
Stress Resistance	OSRDR6, OSWRKY28, OSRACK1A, OSRACK1B, OSNPR1, OSWRKY67, OSMAPK6, OSGSK2, GF14c/14-3-3-c, AET1, SNAC1, OSIRE1		
Quality and Yield	qGL3/GL3.1, GL6, GL7, GW5, OsBip1/BiP3, qGC-6/GBSSI, Gn1a, OsAAP6,		

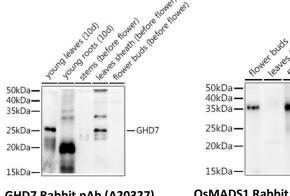








(A19181)



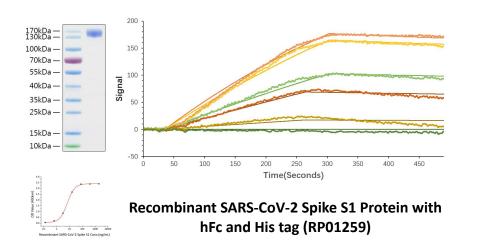
GHD7 Rabbit pAb (A20327) OsMADS1 Rabbit pAb (A20328)

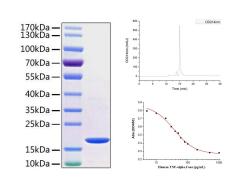
Recombinant Protein



Over thousands of active recombinant proteins used for scientific research and in vitro diagnosis, **standard validations** including SDS-PAGE、SEC-HPLC、IC50、EC50、SPR .etc.

Туре	Examples
Cytokines	TNF-alpha, IL-1beta, IL6, IL-18, IL-33, IL-36beta, IL-16, IL-11, IL-8,IL-17A, IL-28A VEGFA121, FGF21, FGF23, TNFSF15, FGF12,LIF, SCF, Flt3 ligand, etc.
Immune Checkpoint	PD-1, PD-L1, TIGIT, TIM-3, B7-H5, 2B4, 4-BB, 4-BBL, CD28, B7-1, B7-H4, SIRP alpha, etc.
CD Antigen	CD33, CD38, CD5, CD83, CD93, CD58, CD28, CD86, CD89, CD29, CD123, CD200, CD66d, CD293, CD244, CD319, CD172a, CD13, CD119, CD2, CD54, CD137, CD46, etc.
Protease Enzyme	MMP-9, MMP1, MMP-3, MMP-13, WFDC2, MAPK1, Leptin, CA2, etc.
Receptors	EPHA2, EPHA3, ERBB2, ERBB3, ERBB4, FGFR2, FGFR4, FGFR3, Flt4, KDR, NTRK3, PDGFRA, PDGFRB, TEK, FcgammaRIIA/CD32a, FcgammaRIIIA/CD16a
Sars-Cov-2	S1, RBD, S2, S1+S2 ECD, N, Papain-like protease, Envelope Protein, 3CLpro





170kDa — 130kDa — 100kDa — 70kDa — 55kDa — 40kDa — 35kDa — 25kDa — 15kDa — 10kDa — 10k

Recombinant Human TNF-alpha Protein (RP00001)

Recombinant human CD40/TNFRSF5
Protein (RP01218)

ELISA



Туре	Examples
Cytokines	IL-2 \ IL-6 \ TNFA \ MCP-1 \ TGFB1 \ IFNG
Neurotrophin	BDNF \ CNTF \ NGFB
Hormones	TESTO \ E2 \ T3 \ T4 \ PRL \ FSH \ LH \ P \ AMH
Cancer Bio-marker	AFP \ CKM \ S1000B \ NSE \ GDF-15

Note: 3000+ ELASA kit is on sale.

Sars-CoV-2 ELISA Kits and Antibodies



ELISA Kits Screening kit

Catalog No.	Name
RK04149	SARS-CoV-2 Inhibitor Screening Kit(RBd)

ELISA Kits

Catalog No.	Name		
RK04136	SARS-CoV-2 Nucleocapsid Protein ELISA Kit		
RK04154	SARS-CoV-2 Spike S1 Protein ELISA Kit		
RK04135	SARS-CoV-2 Spike RBD Protein ELISA Kit		
RK04159	SARS-CoV-2 S1+S2 ECD(S-ECD) Protein ELISA Kit.		
Individuals' antibo	Individuals' antibodies / IgG kits		

ELISA Antibody Pairs

Catalog No.	Name	
RM17574+RM17575	Rabbit anti-SARS-CoV-2 Nucleocapsid Protein mAb CAP + DET	
RM17608+RM17609	Rabbit anti-SARS-CoV-2 Spike RBD Protein mAb CAP + DET	
RM17611+RM1761	Rabbit anti-SARS-CoV-2 Spike S1 Protein mAb CAP + DET	
Several types of Anti-SARS-CoV-2 RBD Neutralizing Antibodies		

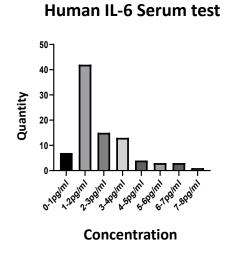
Featured ELISA Kits

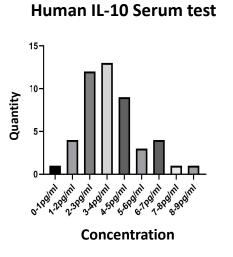


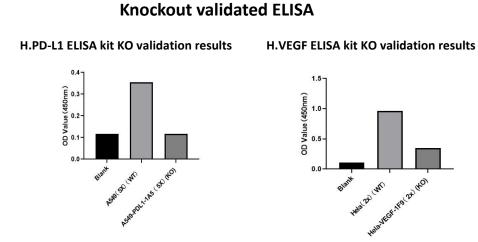
ELISA Kits Screening kit

Catalog No.	Indicators	Linear range (sensitivity)	Sensitivity (ultra-high)	Linear range (conventional)	Sensitivity(conventional)
RK00002	Human IL-2 ELISA Kit	0.78-50pg/mL	0.29pg/mL	7.8-500pg/mL	3.11pg/mL
RK04259	Human IL-10 ELISA Kit	3.12-200pg/mL	1.55pg/mL	31.2-2000pg/mL	6.15pg/mL
RK00004	Human IL-6 ELISA Kit	0.78-50pg/mL	0.32pg/mL	1.56-100pg/mL	0.74pg/mL

Human IL-2 Serum test Application Application Application







KO sample test

KO sample test

Molecular Products Line



Research Reagents

- ◆ Sample preparation
- ◆ PCR
- **♦** qPCR
- ◆ RT
- Cloning
- **♦** Endonuclease
- Molecular tool enzymes

High-throughput Sequencing Reagents

- ◆ Sample preparation
- ◆ Library preparation
- ◆ Capture
- ◆ Adapter, primer
- ◆ Biological information analysis

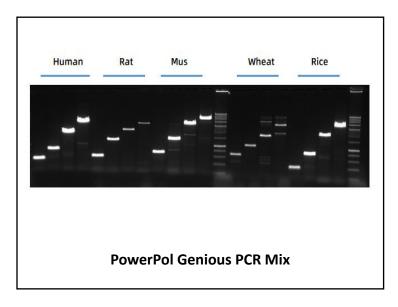
Molecular Diagnostic Reagents

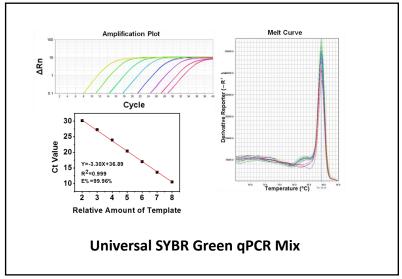
- ◆ Taqman qPCR
- ◆ qPCR lyophilized product
- qPCR direct amplification

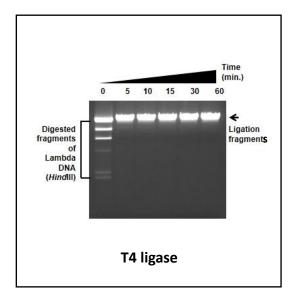
Molecular Enzymes



Туре	Examples
PCR	Gloria Nova HS,PowerPol
qPCR	Universal series, Genious series
RT	Transcriptional Mix, Reverse transcriptional Kit
Cloning	seamless Cloning and assembly Kit, 2S Endonuclease, restriction Endonuclease, ligase
Nuclei acid extraction	Recycling, Plasmid extraction, DNA extraction, RNA extraction

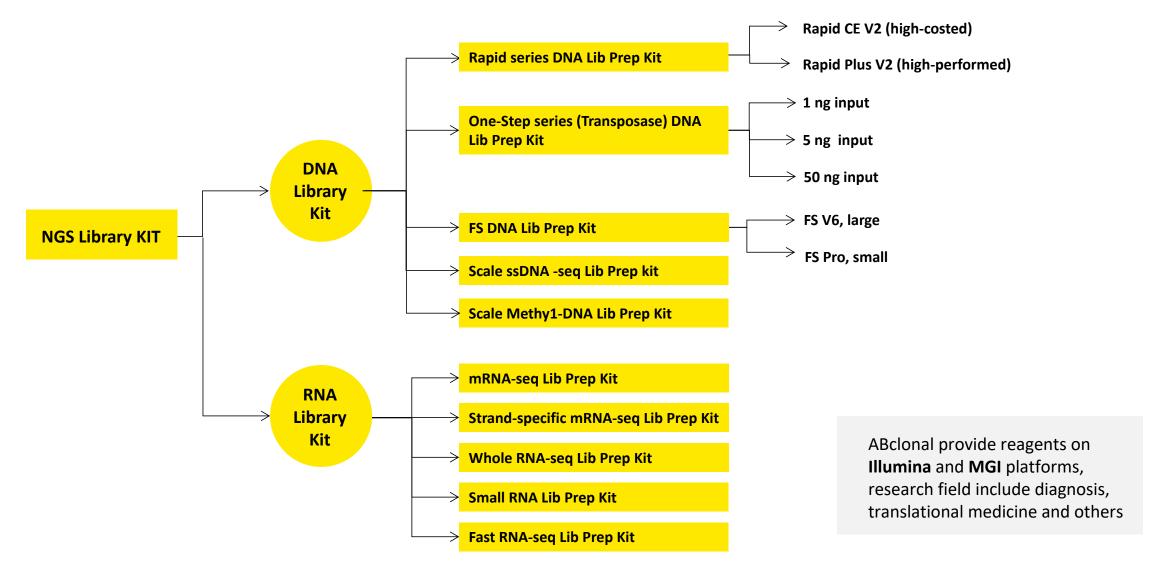






NGS

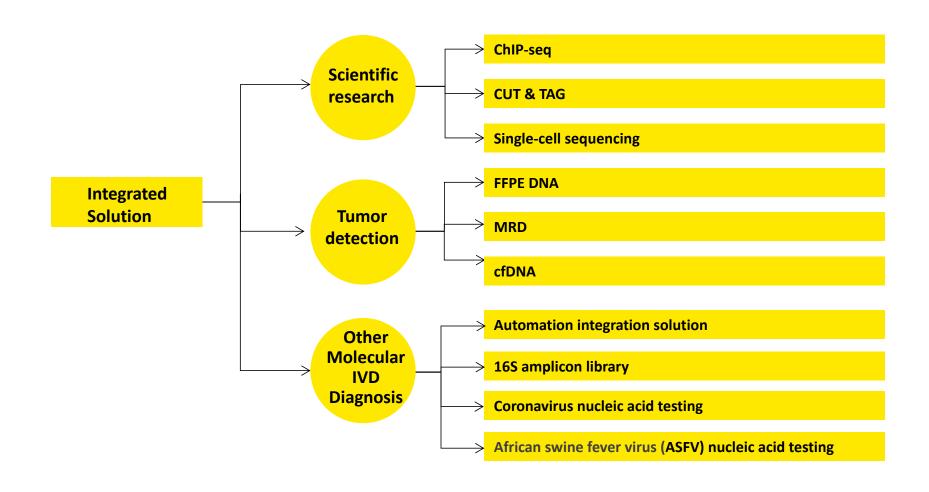




Molecular & NGS Integrated Solution

19





Lab Supplies



Dozens types of lab supplies, as sterile and non-sterile pipette tips, PCR and qPCR microplates, metal coolers, mini centrifuge and tubes.









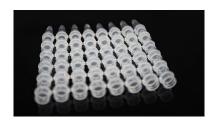
















Highlights of Catalog Products



- **◆** Technical support and quick response
- ◆ Catalog products will be shipped within three days to complete the delivery obligation within 1-2 weeks.
- ◆ Minimize the lot-to-lot difference by rigorous QC system













CRO custom service





Custom service of polyclonal antibody

Whole process from antigen design to antibody purification

◆ Rabbit, mouse, rat, guinea pigs

◆Service time: 10-14 weeks



Custom service of Mouse mAb

Optimized and stable mouse hybridoma-based antibody discovery and development platform

◆Service time: 23-27 weeks



Custom service of Rabbit mAb

4th generation of rabbit mAb development



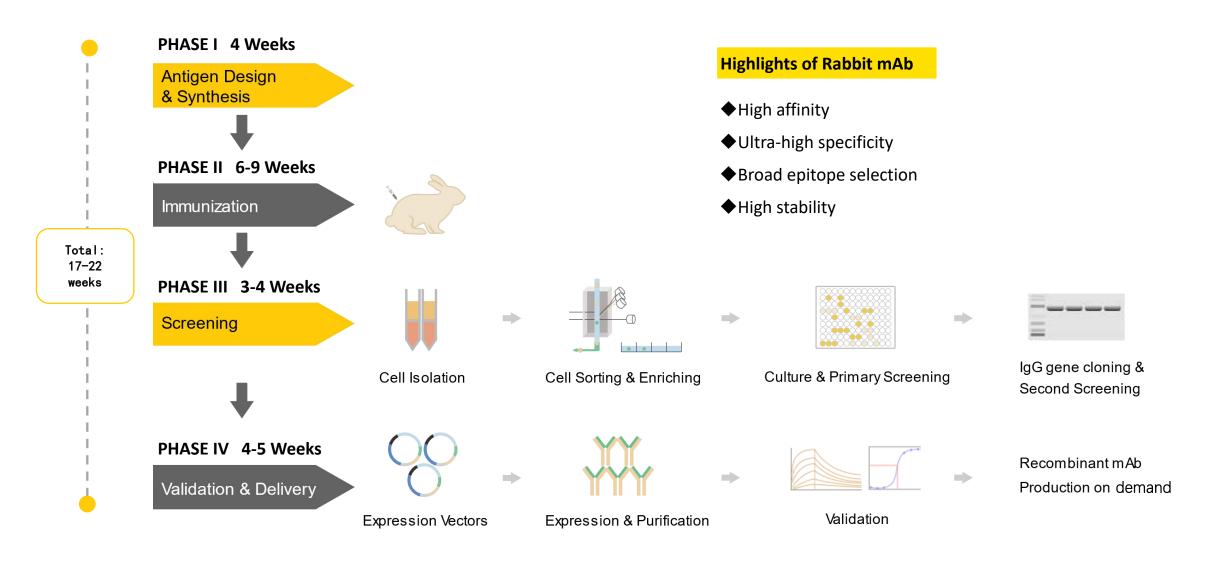
Custom Peptide Synthesis Service

High success rate in peptide synthesis service



The 4th generation of Rabbit mAb



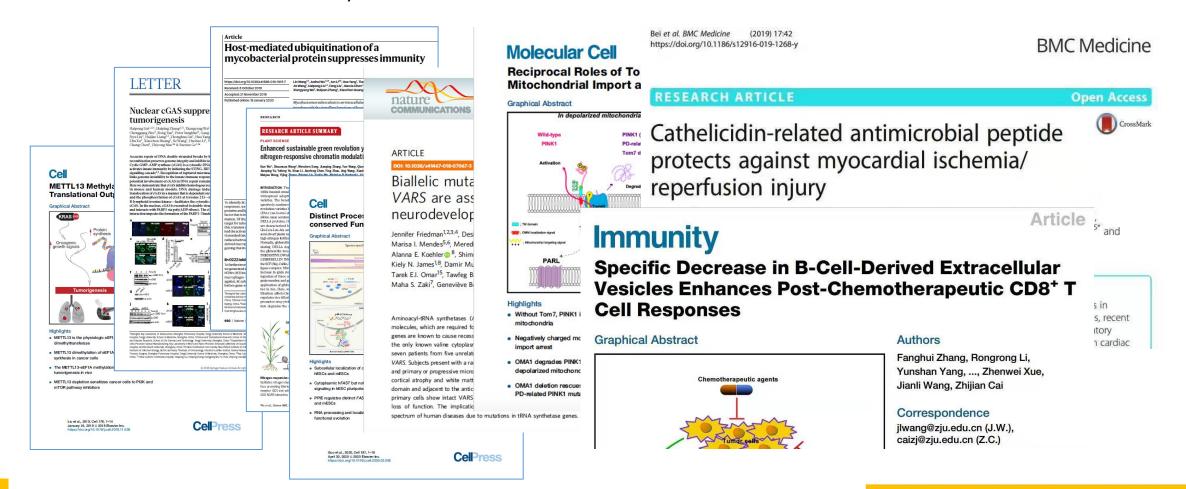


Publications



Since ABclonal was founded, **7000+** scientific papers using our products have been published (counted in Methods papers only). Their recommended products include our antibodies, NGS Lib Prep kits, ELISA kits, and CRO services, etc.

The ABclonal brand has been already known to more clients around the world.



Marketing Events

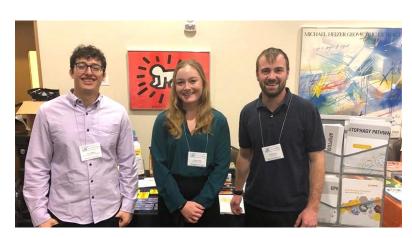


ABclonal has participated in nos of exhibitions and seminars (scientific research/ in vitro diagnostics/ bio-pharmaceuticals etc), also organized dozens of webinars and invited well-known scholars from China and the United States.

Exhibition







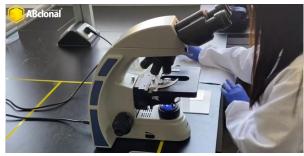
Webnair





Video









For more information, please visit our webiste or send Email to info@abclonal.com.