

**Sino Biological US Inc. (U.S.A)**

Address: 1400 Liberty Ridge Drive, Suite 101,  
Wayne, PA 19087  
Tel: +1-215-583-7898 Fax: +1-267-657-0217  
Email: [order\\_us@sinobiologicalus.com](mailto:order_us@sinobiologicalus.com)

**Sino Biological Europe GmbH (Europe)**

Düsseldorfer Str. 40, 65760 Eschborn, Germany  
Tel: +49(0)6196 9678656  
Fax: +49(0)6196 9678657  
Email: [order\\_eu@sinobiologicaeu.com](mailto:order_eu@sinobiologicaeu.com)

**株式会社日本シノバイオロジカル (Japan)**

事務所の住所: 〒2130001 神奈川県川崎市高津区溝口  
1-19-11 グランデール溝口706  
電話番号: 044-400-1330  
電子メール: [order@sinobiological.co.jp](mailto:order@sinobiological.co.jp)

**Sino Biological, Inc. (Global)**

Address: Building 9, No.18 Kechuang 10th St, BDA  
Beijing, 100176, P.R.China  
Tel: +86-400-890-9989 Fax: +86-10-5095-3282  
Email: [order@sinobiological.com](mailto:order@sinobiological.com)

[www.sinobiological.com](http://www.sinobiological.com)

Follow us on



Sino Biological, Inc

# The Global Leader in Recombinant Technology

## The Global Leader in Recombinant Technology



Recombinant Proteins



Antibodies



cDNA Clones



ELISA Kits



Cell Culture Medium



CRO Service

### Contact Us

Sino Biological US Inc. (U.S.A):

+1-215-583-7898

order\_us@sinobiologicalus.com

1400 Liberty Ridge Drive, Suite 101,  
Wayne, PA 19087

Sino Biological Europe GmbH (Europe):

+49(0)6196 9678656

order\_eu@sinobiologicaleu.com

Düsseldorfer Str. 40, 65760 Eschborn, Germany

Sino Biological, Inc. (Global):

+86-400-890-9989

order@sinobiological.com

Building 9, No.18 Kechuang 10th St, BDA  
Beijing, 100176, P.R.China



# COMPANY PROFILE

## Sino Biological

An internationally recognized reagent supplier and contract research organization, specializing in recombinant protein production and antibody development.

### ○ Main Facility: >355,220 sq ft

- 215,000 sq ft R&D Center
- 53,000 sq ft Clean Manufacturing Plant

### ○ Our Customers: 9,000+

Our products and services are available in more than 90 countries, covering TOP20 Biopharmaceutical enterprise, Biotech companies, Academic research institutions, IVD Companies, and Hospitals

### ○ Our People: 1000+

Master or PhD Degree: 300+

### ○ Products in Stock: 72,000+

All Developed and Produced in House

**SINO  
BIOLOGICAL**

Subsidiary  
Wayne, PA, USA



Subsidiary  
Frankfurt, Germany



Headquarters  
Beijing, China



Subsidiary  
Kawasaki-shi, Japan



Branch  
ChengDu, China



Branch  
WuHan, China



Subsidiary  
TaiZhou, China



Subsidiary  
SuZhou, China



Branch  
HangZhou, China



Branch  
GuangZhou, China



Branch  
ShangHai, China



# "One-Stop" Reagent & CRO Service Provider

## Reagent Bank

### Comprehensive Collection of Catalog Products

- Independently Developed and Produced
- All in Stock



6,800+ Recombinant Proteins



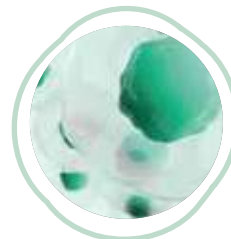
14,000+ Elite Antibodies



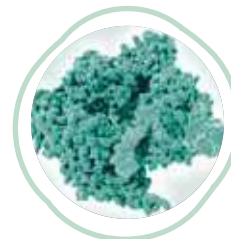
48,000+ cDNA Clones



600+ ELISAs



Cell Culture Medium



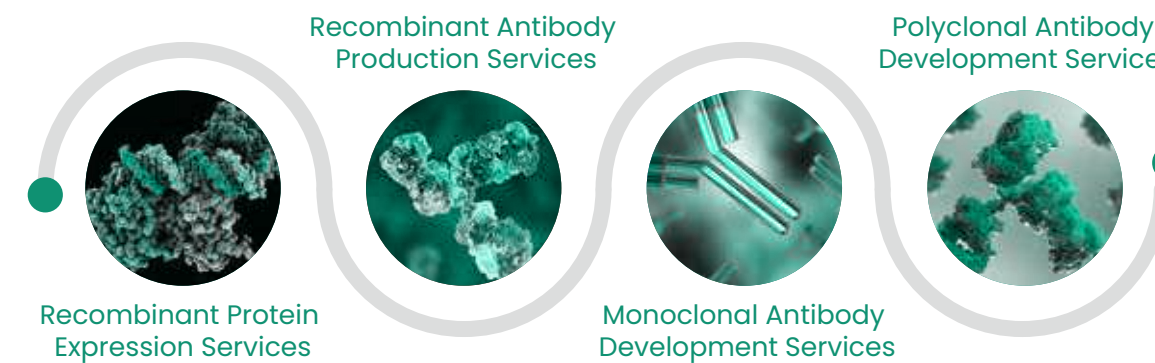
SuperNuclease

## Research Areas

IVD Development  
Immunology Research  
Drug Discovery & Development  
Vaccine Development  
Structural Biology  
Epigenetics Research  
Stem Cell Research  
Cardiovascular Research  
Cell Biology Research  
Neuroscience Research  
Cancer Research  
Virus Research

## CRO Services

Focused on the Recombinant Production of Antigens and Antibodies



12 Days: From Gene Synthesis to 100mg Eukaryotic Protein Production

# Advanced Technology Platforms

## Comprehensive Technical Capabilities

Cell Culture

Vector Construction

Quality Control Assay

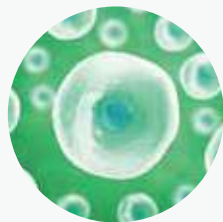
Scale-up Production

Antibody Screening

Immunization

Protein Purification

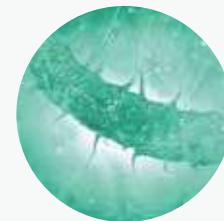
## Recombinant Production Platforms



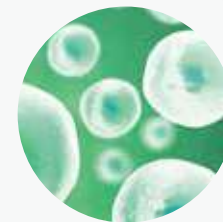
HEK293/CHO  
Transient system



*E. coli* System



Baculovirus-insect  
System



CHO/HEK293 Stable Cell  
Line Development



Cell-Free Protein  
Synthesis System



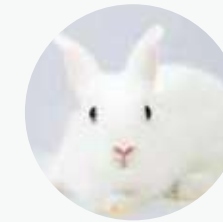
Mouse mAb Development  
(Hybridoma)



Single B-cell  
Based Platform



Rabbit mAb Development  
(Phage Display)



Rabbit pAb  
Development

## Antibody Development Platforms

Multiple Antibody  
Development Technologies



# High-throughput & Scale-up Production Capacity

## High-throughput Production Systems

Routine High-throughput Projects of Up to 1,000 Per Batch



150L



20L



700L



250L



750L



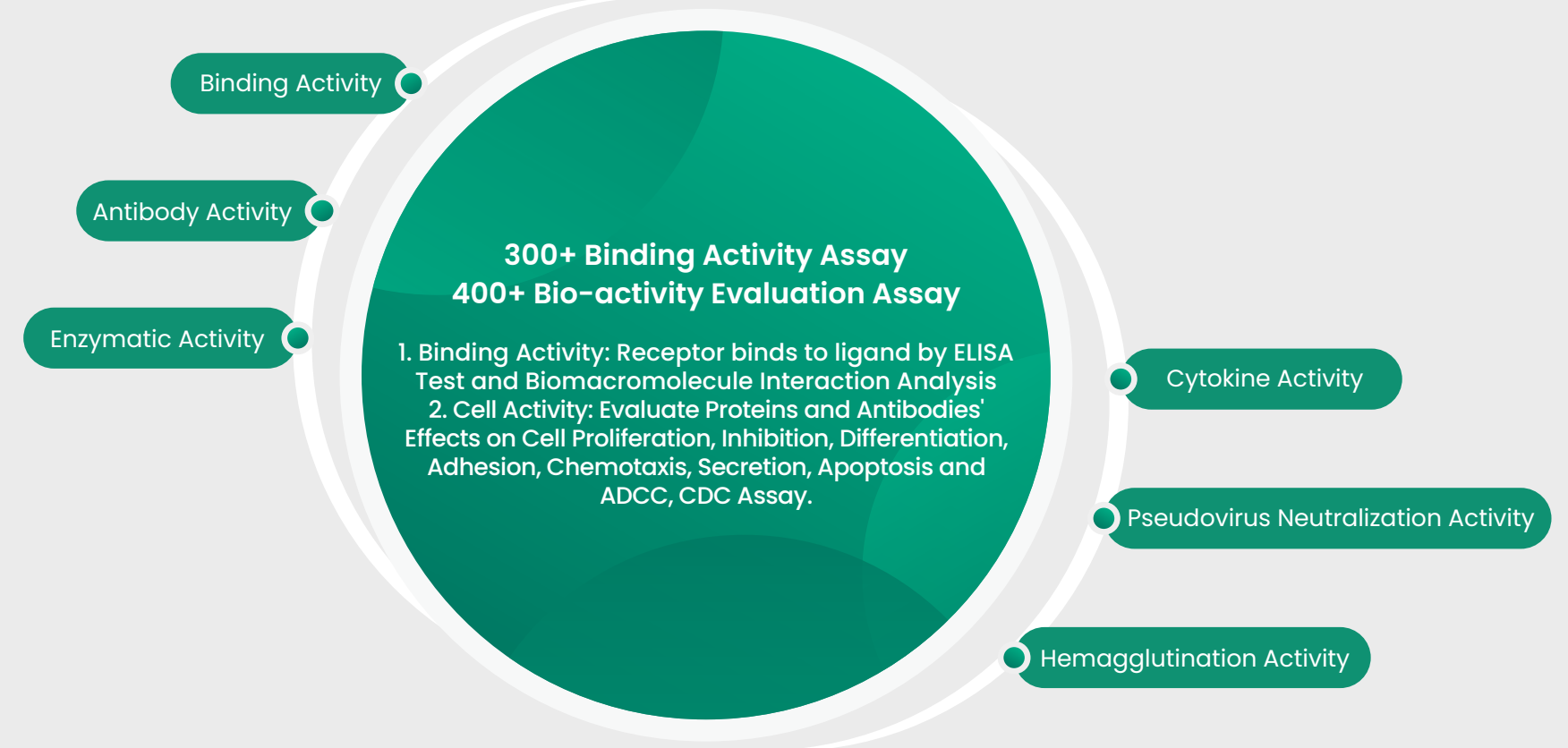
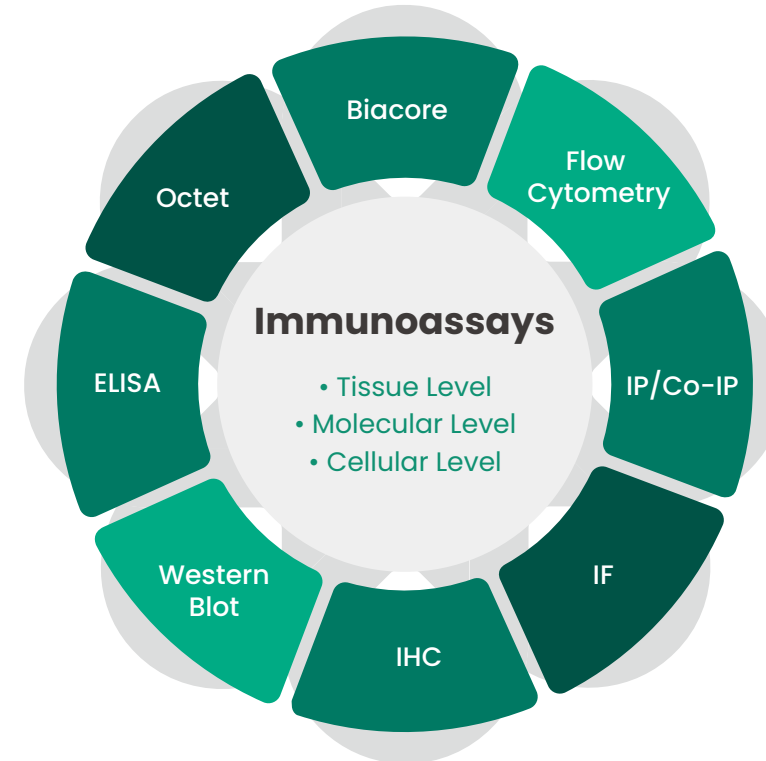
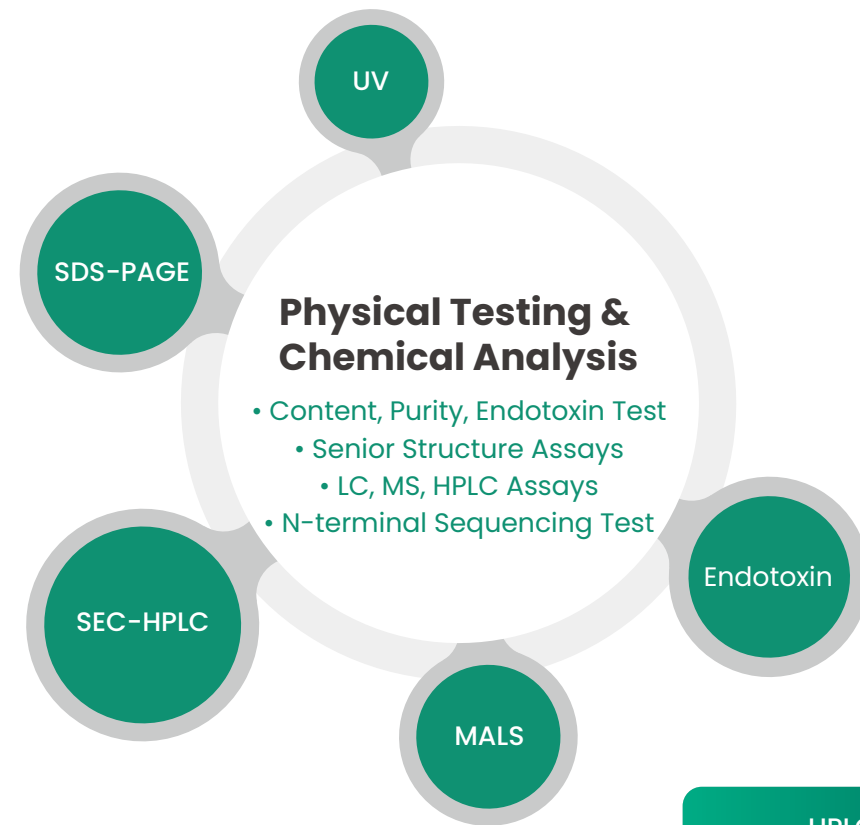
1500L



## Wide-ranging Level of Scale-up Production

- 80+ Bioreactors: From 20L to 1500L
- Recombinant Production: From 0.1 Milligram to Kilogram Level

# Effective Quality Management System



## Advanced Equipments

HPLC



Biacore



Octet



## Quality System Certification

ISO9001



ISO13485



CNAS



# 6,800+ Recombinant Proteins

- >85% Expressed in Eukaryotic Cells: Authentic Post-Translational Modifications
- Bulk Production : ~1g Available
- Comprehensive Collection: Various Species, Multiple Tags, Disease Variants

## Viral Antigen Bank

- 1200+ Recombinant Viral Antigens
- Various Types: Influenza Virus, CoV, RSV, HIV, Ebola Virus ...
- Latest Strains & Vaccine Strains
- For Antibody Drugs and Vaccine Development

## Fc Receptors

- Largest Supplier for Fc receptor Proteins
- Multiple Species, Validated Activity
- Human Variants for IgG Binding
- Popular Targets: CD64, CD32a, CD32b, CD16a, FcGRT&B2M

## Cytokines & Receptors

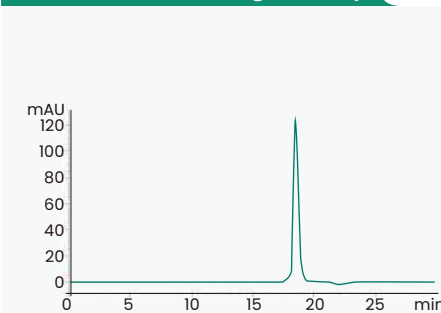
- 800+ Recombinant Cytokines
- Covers All Cytokine Families
- 12 Species
- Popular Targets: VEGF, TNF $\alpha$ , HGF, EGF, IL6, BMP2

Various Tags/Tag Free

Low Endotoxin

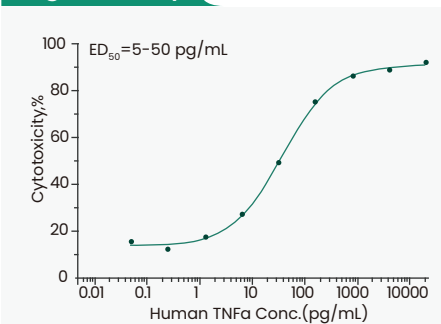
Multiple Species

HPLC Validated High Purity



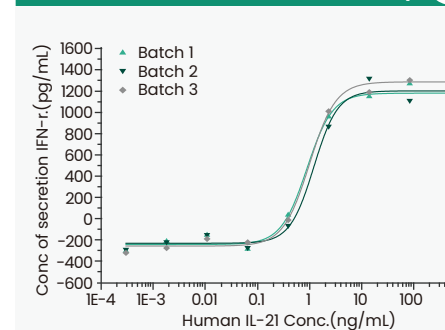
Human IL-1 $\beta$   
Purity Validated by HPLC: >95%

High Activity



Cytotoxicity Assay  
Cell: L929 Mouse Fibrosarcoma Cells

Batch-to-batch Consistency



Induce IFN- $\gamma$  Secretion  
Cell: Human Natural Killer Lymphoma NK-92 Cells



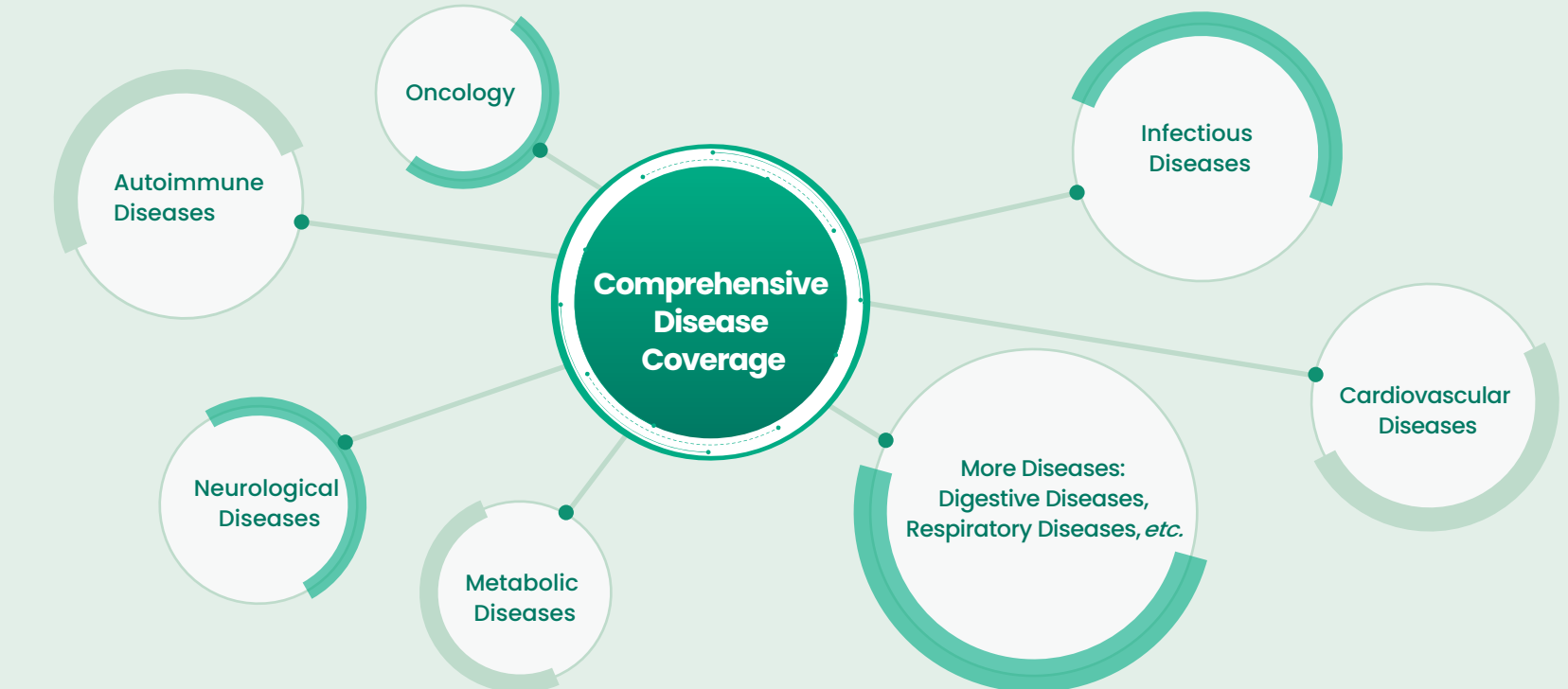
Protein Supplier to Watch in 2021-2022  
Growth Factor Supplier to Watch in 2024

The supplier with the largest percentage increase in protein reagent citations during the previous year.

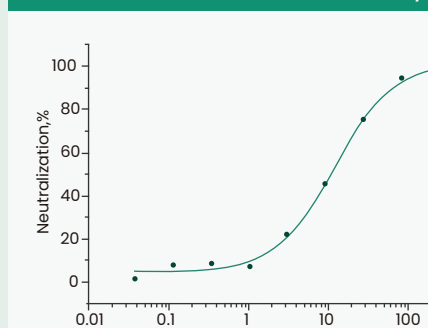
CiteAb Awards: Established by CiteAb for the scientific research industry and are based on the reference data of product references.

## Drug Targets

- 4000+ Recombinant Targets
- Supports Multiple Therapeutic Areas
- Multiple Research Animal Models Covered
- Popular Targets: PD-1, B7 Family, TNF Superfamily

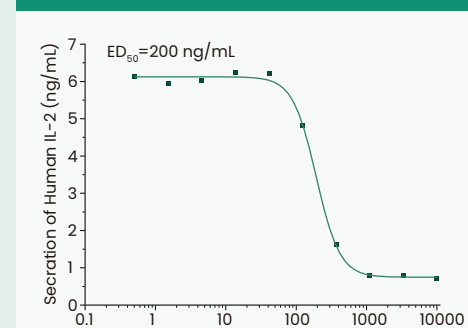


Human KDR Inhibits VEGF Activity



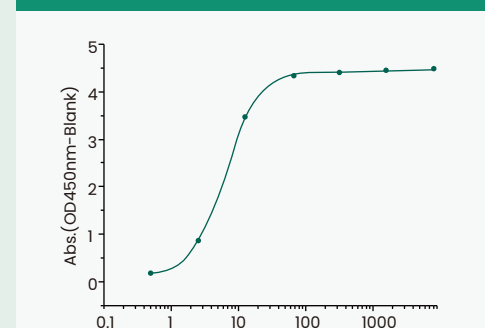
Human KDR Conc. (μg/mL)

Human CTLA-4 Inhibits IL-2 Secretion



Human CTLA-4 Conc. (ng/mL)

SARS-CoV-2 RBD N501Y Variant Binds with ACE2



SARS-CoV-2 RBD Conc. (ng/mL)

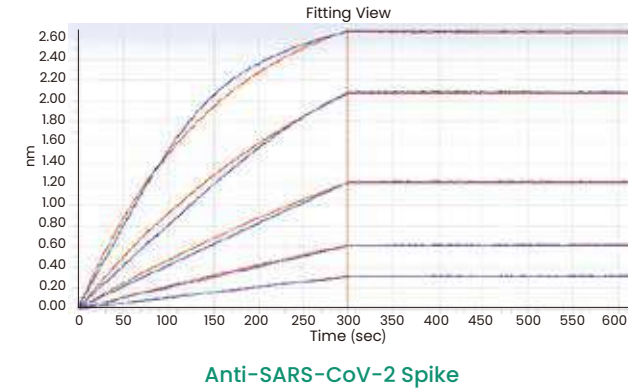


# 14,000+ Elite Antibodies

- Multiple Antibody Types: Rabbit mAb, Rabbit pAb, Mouse mAb, Labelled Antibodies
- Validated in Different Applications: ELISA, WB, FCM, IHC, IF, IP, Neutralization, *etc.*
- Conjugated Antibodies, Tag Antibodies, Secondary Antibodies, and Control Antibodies Available

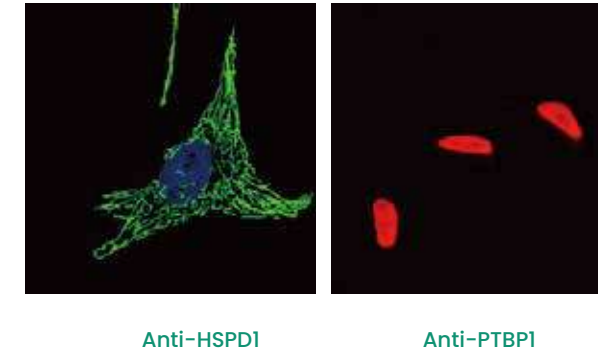
## High Affinity

SARS-CoV-2 Spike Antibody Recognize RBD Antigen  
Octet: 0.006nM



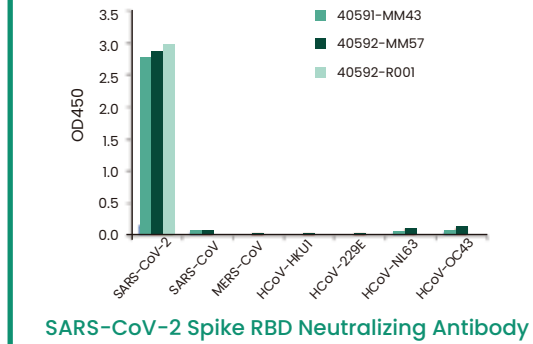
## High Sensitivity

Detect low-abundance Samples



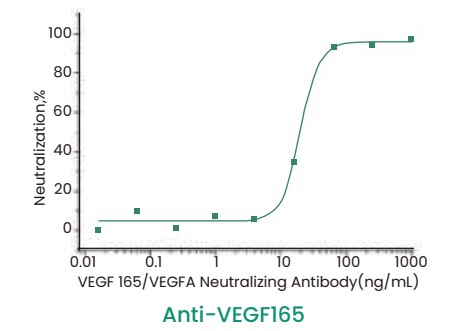
## High Specificity

Recognizes SARS-CoV-2 Spike with High specificity without cross-reactivity with other CoVs assessed in ELISA



## High Neutralizing Activity

Neutralizes VEGF165 induced proliferation in HUVEC human umbilical vein endothelial cells,  $IC_{50}=10-47ng/mL$



## Rabbit Monoclonal Antibodies

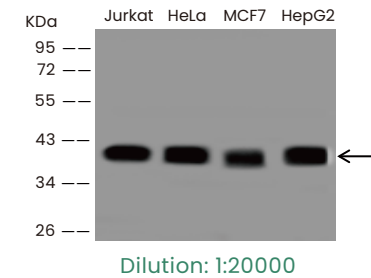
80% Using Eukaryotic Recombinant Proteins as Immunogen

Best Choice for IHC  
Anti-Human TFRC



More Sensitive and Specific

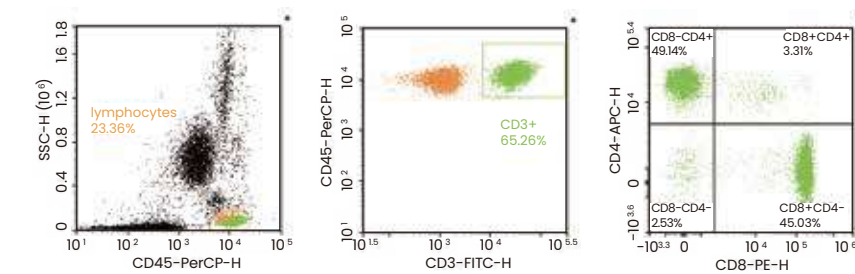
High Sensitivity  
Anti-Human Nucleophosmin



## FCM Antibodies for Diagnostics

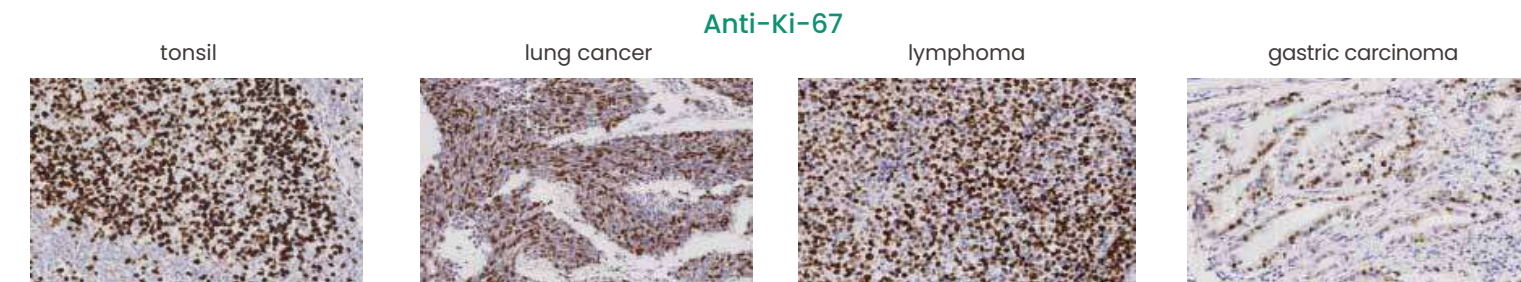
Fully Verified to Ensure High Specificity, Used as Raw Materials by Many Companies.

Targets: CD3, CD4, CD8, CD45, CD56, CD19, *etc.*



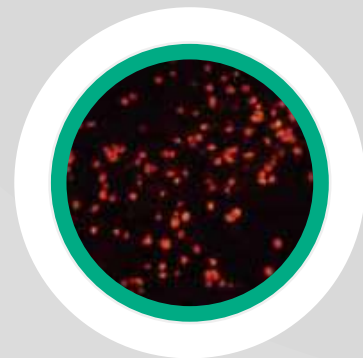
## IHC Antibodies for Pathology Biomarkers

Validated in Various Tissues and Strict Quality Control System; Reliability and Repeatability Guaranteed.  
Targets: Ki-67, HER2, CD2, CEA, CD3, P53, CD68, CD20, PD1, *etc.*

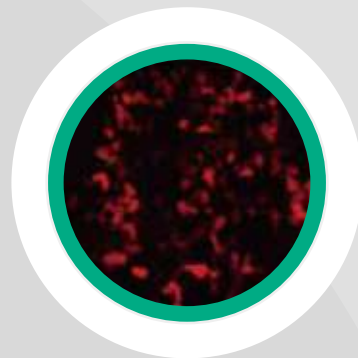


# 48,000+ cDNA Clones • -- All in Stock

- Various Species: Human, Rat, Mouse, Rabbit, Cynomolgus, Canine, Ferret, Virus, *etc.*
- Multiple Tags: N/C-terminal Tags including Myc, HA, FLAG, His, GFPSpark®, and OFPSpark®
- Expression Validated (Partial)



Human MTOR cDNA,  
C-OFPSpark®



Human PKM2 cDNA,  
C-OFPSpark®



H7N9-NP cDNA,  
C-OFPSpark®



Human PTPN1 cDNA,  
C-OFPSpark®

## 600+ ELISAs •

- 400+ Ready-to-use ELISA Kits, 200+ ELISA Pair Sets
- Used for Human Cytokine Detection, Oncology Target Detection, Viral Antigen Detection, *etc.*

## Raw Materials for Diagnostics •

- SARS-CoV-2 Antigen & Antibody Reagents
- Respiratory Disease Virus Reagents: Influenza Virus, RSV, HPIV, HAdv, *etc.*
- Biomarkers
- Allergens
- IHC Antibodies for Pathological Diagnosis
- FCM Antibodies for Diagnostics

# Viral Reagent Bank

## World's Largest Viral Antigen Bank

Widely Used in Therapeutic Antibody, Vaccine, and Immunodiagnostic Assay Development

- 6000+ Viral Reagents: Recombinant Antigens, Antibodies, ELISA Kits, Pseudovirus, *etc.*
- Covering 50 Different Types, 500+ Strains of Viruses



### Recombinant Antigens

- 1300+ Antigens from
- 500+ Strains



### Antibodies

- 400+ Antibodies
- 20+ Neutralizing Antibodies



### Assay Kits

- 30+ Virus Antigen Detection Kits
- 10+ Antibody Titer Assay Kits



### Reagents for Antiviral Immune Response Research

- 800+ Cytokine Products from
- 240+ Cytokine Molecules



### More Viruses



AcMNPV



CHIKV



CHPV



CyCMV



SABV



JUNV



GTOV



RVFV



SFTSV



Lassa Virus



HAdV-B



EV-D68



SIV



LCMV



HAdV-E



CV



TBEV



LUJV



HBV



HTNV



HPV



MARV



HCV



VSIV



NIV



HEV



CMV



HIV



PCV2



EBV



WNV



WWAV



PRRSV



DcCoV



Dengue Virus



Vaccinia Virus



RSV



HPIV-3



HPIV-4



Ebola Virus



EV71



Zika Virus



SARS-CoV-2



HCoV-229E



HCoV-HKU1



HCoV-NL63



HCoV-OC43



MERS-CoV



SARS-CoV



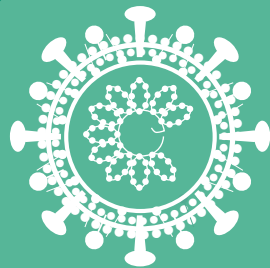
Influenza A



Influenza B

### Influenza Virus





## SARS-CoV-2 Reagents

6 Days: Completed R&D of Omicron Spike RBD Protein



### Supports SARS-CoV-2 Basic Research

1,000+ Research Papers Published on Journal, Including Nature, Science, Cell, *etc.*



### Supports the Development of Immunodiagnostic Assay

Support 360+ Diagnostics R&D Companies to Develop Immunodiagnostic Kits



### Supports the Development of Vaccine & Therapeutic Antibodies

7,000+ Projects: Recombinant SARS-CoV-2 Antibody Production

1,000+ Projects: Pseudovirus Neutralization Assay and Neutralizing Antibody ELISA Assay



### 370+ Recombinant SARS-CoV-2 Antigens

Recombinant SARS-CoV-2 Variants: 300+

Covering Most of VOCs & VOIs  
Omicron:

XBB.1.16, XBB.1.5, XBB.1, XBB, BQ.1.1, BF.7, BA.4, BA.5, BA.5.2, CH.1.1, XBF

Small Molecule Drug Target Protein of SARS-CoV-2: 15+

PLpro	3CLpro	RdRp	Helicase	Methyltransferase
NSP3	NSP7	NSP8	NSP9	NSP10



### 120+ SARS-CoV-2 Antigen Detection Antibodies

Antigen Detection Antibody Pairs      Neutralizing Antibodies



### Inhibitor Screening Kits, Antibody Titer Assay Kits, Pseudovirus, *etc.*



## Influenza Virus Reagent Tools

- 3,000+ Influenza Virus Reagents
- 630+ Influenza Viral Antigens
- 200+ Influenza Viral Antigen Detection Antibodies

Covering 10 kinds of Antigens  
HA (HA0, HA1, HA2), NA, NP, M1, M2, NS1, NS2, PB1, PB2, PA

Covering 60 Subtypes, 330+ Strains

Note: All the Data Comes from 2021/12/15, Please Visit our website to Get More Up-to-date Information.

## CRO Services

Sino Biological offers a variety of customized services, mainly focusing on recombinant production of antigens and antibodies. Sino Biological is the researchers' one-stop technical services shop for the advanced technology platforms they need to make scientific advancements. In addition, Sino Biological offers TOP10 pharmaceutical companies and biotechnology firms pre-clinical production technology services for hundreds of monoclonal antibody drug candidates.

### Recombinant Protein Expression Services

- Mammalian Cell Expression System (HEK293/CHO)
- Insect Cell Expression System
- *E. coli* Cell Expression System

### Antibody Production Services

- High-throughput Antibody Production
- Large-scale Antibody Production

### Antibody Development Services

- Fast Mouse mAb Development
- Rabbit mAb Development
- Fast Rabbit pAb Development
- Anti-idiotypic Antibody Development
- Bispecific Antibody Production
- Antibody Fragment Production
- Chimeric Antibody Production
- Phospho-Specific Antibody Production



## Our Mission

“To advance life science and improve human health through the provision of superior quality research reagents and CRO services.”

--Sino Biological, Inc.