



武汉生物制品研究所有限责任公司
WUHAN INSTITUTE OF BIOLOGICAL PRODUCTS CO.,LTD.



COMPANY PHILOSOPHY

ALL FOR HEALTH, HEALTH FOR ALL

WIBP CULTURE

SELF-RELIANT, PRACTICAL, INNOVATIVE

WIBP

WUHAN INSTITUTE OF BIOLOGICAL PRODUCTS CO., LTD.

WUHAN, CHINA

ALL FOR HEALTH
HEALTH FOR ALL

Company Profile



Wuhan Institute of Biological Products Co., Ltd. (WIBP), founded in 1950, is affiliated to China National Biotech Group (CNBG), which is a subsidiary of China National Pharmaceutical Group Co., Ltd. (Sinopharm), a large healthcare group directly under the State-owned Assets Supervision and Administration Commission of the State Council. It is a large-scale high-tech enterprise integrating education, development, manufacturing and marketing of biological products, and one of the major biological products manufacturing bases in China as well. It has

trained a large number of senior biotechnology professionals. With a history of more than 70 years, WIBP has four kinds of business: vaccines for human use, therapeutic preparations, diagnostic reagents and technical services. The development of WIBP is driven by innovative ideas and products.

WIBP has more than 60 production licenses. Since its establishment, it has produced and supplied more than 6 billion doses of vaccines. In the past 70 years, it has always shouldered the responsibility of developing, manufacturing and supplying biological products for national health, and has made outstanding contributions to the fight against infectious diseases in China and even the world.

Products







The total annual output of vaccines exceeds 1.2 billion doses

-  Reassortant Rotavirus Vaccine, Live, Oral, Hexavalent (Vero Cell)
-  Adalimumab Solution for Injection
-  Enterovirus 71 Vaccine(Vero Cell), Inactivated
-  Influenza Vaccine (Split Virion), Inactivated, Quadrivalent
-  Tetanus Vaccine, Adsorbed
-  Poliomyelitis Vaccine (Vero Cell), Inactivated, Sabin Strains
-  Japanese Encephalitis Vaccine, Live
-  Diphtheria, Tetanus and Acellular Pertussis Combined Vaccine, Adsorbed
-  Diphtheria and Tetanus Combined Vaccine, Adsorbed
-  Group A Meningococcus Polysaccharide Vaccine
-  Leptospirosis Vaccine

Reassortant Rotavirus Vaccine, Live, Oral, Hexavalent (Vero Cell) – Rotasiro®

This product is prepared by inoculating African green monkey kidney cells (Vero cells) with human-bovine reassortant rotavirus strains of serotypes G1, G2, G3, G4, G8, G9 followed by culturing, virus harvesting, concentrating, pooling of six monovalent bulks and adding protective stabilizer. It can be used for the prevention of acute gastroenteritis caused by rotavirus in infants.






-  First of its kind
-  No risk of intussusception
-  Broadest serotype coverage
-  High protective efficacy
-  Preservative-free & antibiotic-free
-  Breakthrough homogeneous process

Adalimumab Solution for Injection



This product is independently developed and produced by WIBP. It specifically binds to soluble tumor necrosis factor- α (TNF- α), thereby effectively inhibiting its associated pathological effects. Utilizing an advanced antibody platform and a stringent quality control system, the manufacturing process incorporates internationally leading cell culture and antibody purification technologies. This enables high-density, large-scale cell cultivation followed by multi-step chromatography, resulting in a biosimilar highly comparable to the reference product.

-  Internationally advanced single-use bioreactor production process
-  High purity, low Impurities (HCP, DNA Residue, etc.)
-  Highly similar to the originator drug



Enterovirus 71 Vaccine (Vero Cell), Inactivated



This product is produced with a unique multi-step column chromatographic purification process, and the impurity removal rate is as high as over 99%, therefore, the vaccine has high specific activity, and a good safety and efficacy profile. It can effectively prevent the hand-foot-mouth disease caused by enterovirus 71 (EV71). The rate of protection against hand-foot-mouth disease caused by EV71 is over 90%, and that against severe cases is 100%.

- ✓ Bioreactor process
- ✓ Multi-step column chromatographic purification process
- ✓ Clinical study results were published in the *Lancet*

Influenza Vaccine (Split Virion), Inactivated, Quadrivalent

This product is a preparation made from the WHO recommended prevalent strains of influenza virus, which are grown separately in embryonated chicken eggs. It is prepared by incubation, virus harvest and the production process of inactivated vaccine. The product is manufactured with WIBP's patented process, which has high impurity removal rate; therefore, the vaccine has high purity and showed good safety and immunogenicity in the clinical trials. It is used for the population aged 3 years old and above.



Excellent process

Advanced equipment

Annual production capacity > 30 million doses

Tetanus Vaccine, Adsorbed



This product is a preparation of purified tetanus toxoid adsorbed onto aluminum hydroxide. The toxoid is made from the toxin by the cultivation of a strain of *Clostridium tetani*, refined and detoxified. It can be used by the whole population with high-risk of trauma. Vaccination for pregnant women can prevent maternal and neonatal tetanus.

The toxoid is purified before detoxification, which is a patented process. No toxicity reverse has been found up to today. It is 0.5ml per dose, and the potency is no less than 60IU, which is higher than what's required by the Chinese Pharmacopeia.

Poliomyelitis Vaccine (Vero Cell), Inactivated, Sabin Strains

This product is a liquid trivalent vaccine, prepared from polio viruses of type I (Sabin strain), type II (Sabin strain) and type III (Pfizer strain) grown in Vero cells separately, followed by virus harvest, concentration, purification, inactivation and proportional mixing. It is used for infants and children, mainly for infants aged 2 months and older to prevent poliomyelitis caused by poliomyelitis virus type I, type II and type III.

- 1000L bioreactors are used to produce high density of cells on microcarriers. The antigen has high specific activity and the vaccine has good immunogenicity.
- The whole production process is free from antibiotics, and the refining process reduces the formaldehyde residue to the maximum and makes the vaccine safer.



Products Under Development

Cell Cultured Quadrivalent Influenza Vaccine (Split Virion)



- MDCK cells are used as production substrate, and vaccine indications are expanded.
- Developed with influenza strains recommended by WHO, it can effectively prevent influenza.
- A new purification process is employed to increase the purity of the vaccine and to reduce the adverse events.

Multivalent HFMD Vaccine, Inactivated

- As the vaccine covers various prevailing serotypes, the spectrum of immune protection will be increased to 90%.
- It can greatly reduce the incidence of hand-foot-mouth disease in children.
- The conventional inactivation process is optimized to enhance the immunogenicity of the vaccine.




Diphtheria, Tetanus and Acellular Pertussis Combined Vaccine, Adsorbed




- The product is upgraded through development of combination vaccine.
- The immunization schedule is simplified and the injections are reduced.

BSL-3 Lab



 SARS-CoV-2 prototype strain

 Alpha, Beta, Delta, Omicron variants of SARS-CoV-2


 Monkey pox virus strains

BSL-3 microbiological lab

ABSL-3 small animal lab

ABSL-3 medium-sized animal lab

 Tests on SARS-CoV-2, highly pathogenic avian influenza virus and monkey pox virus.

 Evaluation of vaccines, antibodies and other antiviral drugs at cell level, rodent level and non-human primates level.

Talent Training

In 1981, WIBP was approved as one of China's first institutions qualified to grant doctor and master's degrees, with doctor programs in immunology and master programs in immunology and pathogen biology. The graduate students participate in the national, provincial and municipal scientific projects undertaken by WIBP, engaging in new product development and process quality improvement.



 Sole doctoral program in biological products industry

 Post-doctoral research center

Quality Policy



Quality First. People First.

WIBP has established a quality management system covering the whole life cycle of the product, from research and development, technology transfer, commercial production to the end of the product, in compliance with the Chinese GMP, WHO GMP, and ICH guidelines.



The quality control labs are CNAS accredited.



All the marketed products and their production facilities are certified by the national regulatory authorities.



Rotasiro® is advancing towards the goal of WHO PQ, a planned strategic step in fulfilling our commitment to global vaccine supply.

