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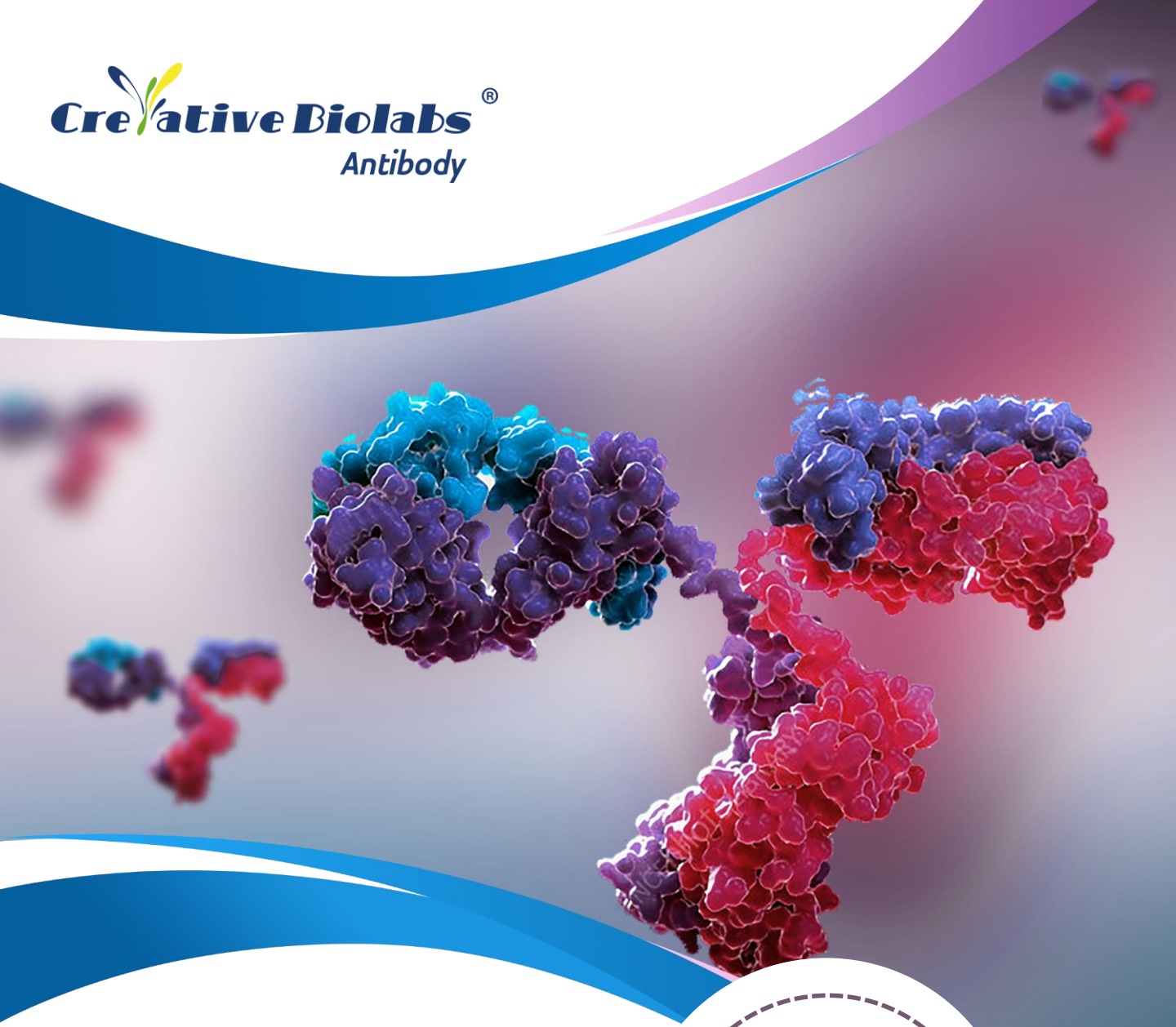
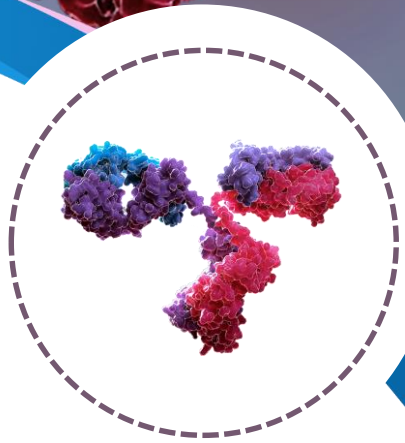
Antibody





# Prospect of Targeted Immunological Checkpoint Treatment

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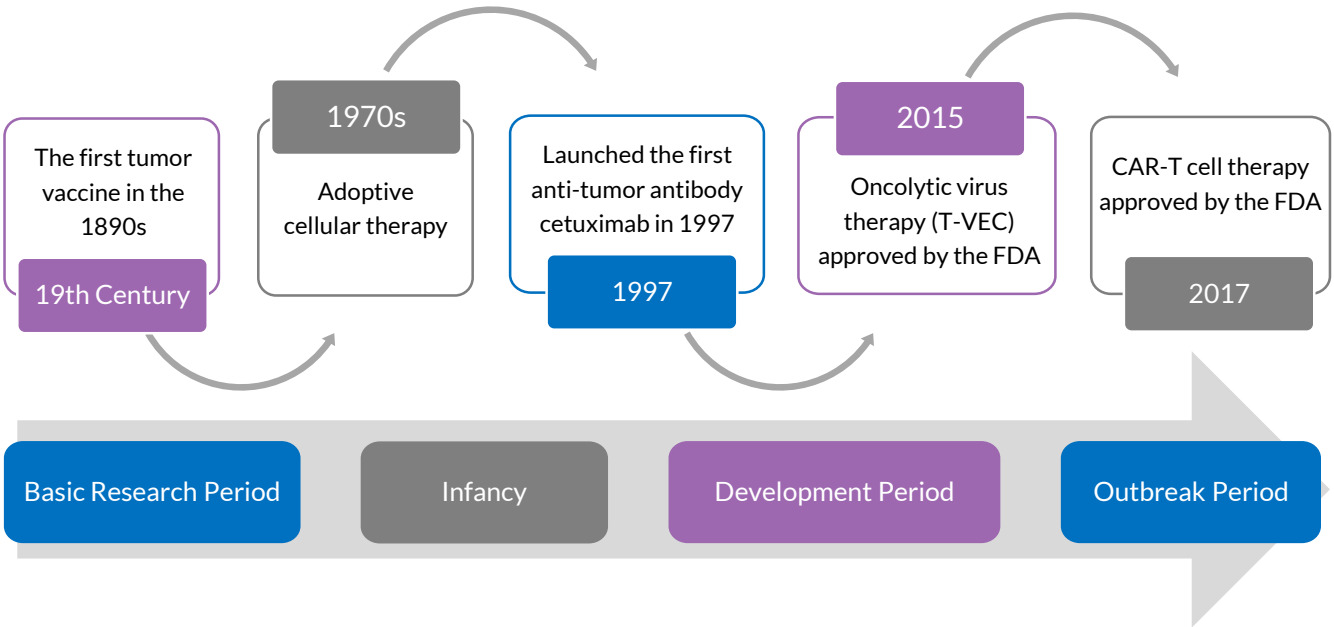
# Prospect of Targeted Immunological Checkpoint Treatment

## Background of Immunotherapy

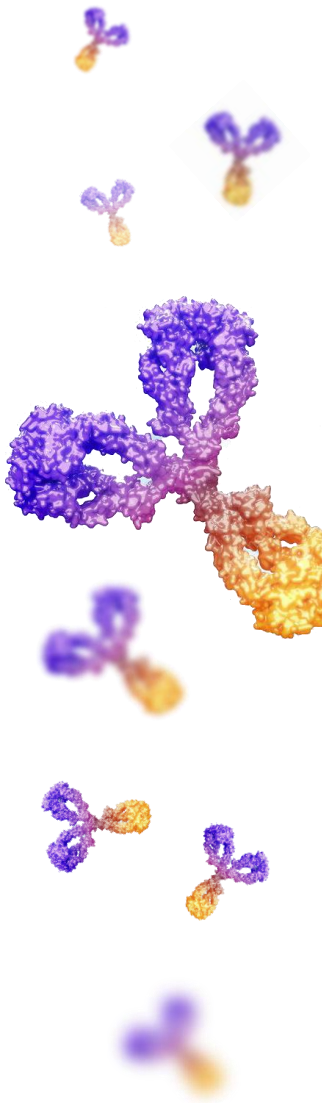



## The Importance of Immunotherapy

The basic idea of tumor immunotherapy is to activate the immune system like a microbial infection to eliminate malignant tumors. Such treatments include monoclonal antibodies, recombinant cytokines, and cellular therapies such as chimeric antigen receptors. With this special immunotherapy, some cancer patients who are not sensitive to other direct therapies have shown good therapeutic effects. Immune checkpoint treatment has significantly better safety than refractory cancers compared to other therapies, and long-term inhibition has been achieved in a small number of patients. These results give cancer patients hope for better control or cure of cancer. In the near future, treatments based on immunological checkpoint treatment will revolutionize cancer treatment.

# Prospect of Targeted Immunological Checkpoint Treatment

## Current Status of Immunotherapy



To date, based on clinical transformation efforts initiated by Allison and Honjo, the regulatory authorities have approved at least six inhibitory antibodies against the immune checkpoints CTLA-4 and PD-1 and a combination for cancer treatment. The current research has made it clear that they also play a role in different immune response stages.

CTLA-4 mainly affects T helper cells (CD4+ cells) in immune priming reactions. PD-1 inhibits T cell receptor signaling pathways and thus mainly affects effector T cells (CD8+ cells). Combined treatments can achieve better results due to differences in these basic functions.

In fact, there are multiple checkpoints that can stimulate or inhibit the different levels of the immune response, even the entire immune system. Recently, IL-17A inhibitory antibody (Secukinumab) has been successfully used to control the treatment of immune-related adverse reactions. Immunological checkpoint inhibitors do not have the same therapeutic effect on all tumors.

# Prospect of Targeted Immunological Checkpoint Treatment

## Challenges and Opportunities for Immunotherapy

Key obstacles to overcome on the path of immunotherapy include the serious side effects that immunotherapy may have, the antagonistic response to immunological checkpoint inhibitor therapy, and how to discover new targets for immunotherapy.

Other immunosuppressive targets, including LAG-3, TIM-3, TIGIT, VISTA, B7/H3 and LILRB4, are being tried for the treatment of cancer. The real changes will be accompanied by the emergence of new generations of this problem. With the advent of cancer therapy with immunological checkpoint inhibitors, some cancers that were previously very limited or incapable of treatment have had surprising effects.

The development of biomarker predictions for immune checkpoint inhibitors is also an important area of research in the future. The emergence of immunological checkpoint inhibitors in the field of cancer treatment is itself a Copernican revolution in cancer treatment.

Reference: *Rios, A., Salazar, G. T. A., Zhang, N., & An, Z. (2019). The 2018 Nobel Prize in Medicine for breakthroughs in targeting immune checkpoint inhibitors: a brief perspective*

## Featured Antibodies for Immunosuppressive Targets

| Targets | Clone | Applications | Type | Species Reactivity | Cat. |
|---|---|---|---|---|---|
| CTLA-4 | BN13 | Neut, FC | Mouse IgG2a | Human | CBMAB-0932-LY |
| CTLA-4 | 9H10 | Neut | Hamster IgG2 | Mouse | CBMAB-1010-LY |
| CTLA-4 | 9D9 | Neut, WB | Mouse IgG2b | Mouse | CBMAB-1009-LY |
| CTLA-4 | 4F10 | Neut, FC | Hamster IgG | Mouse | CBMAB-1008-LY |
| CTLA-4 | 1G7-H10 | FC | Mouse IgG2a | Human | CBMAB-Z0100-LY |
| PD-1 | J116 | Neut | Mouse IgG1 | Human | CBMAB-0943-LY |
| PD-1 | J110 | FC | Mouse IgG1 | Human | CBMAB-0942-LY |
| PD-1 | IHC001 | IHC | Mouse IgG | Human | CBMAB-MA195-YC |
| PD-1 | D7D5W | IF, ICC | Rabbit IgG | Mouse, Rat, Hamster | CBMAB-CP1893-LY |
| PD-1 | 6B10 | WB, ELISA | Mouse IgG1 | Human | CBMAB-A6491-LY |
| PD-1 | NAT105 | FC | Mouse IgG1 | Human | CBMAB-C12157-LY |
| PD-1 | J105 | FC | Mouse IgG1 | Human | CBMAB-C4048-CN |
| PD-1 | 9A187 | IHC, FC | Mouse IgG1 | Human | CBMAB-C0427-CN |
| PD-1 | CBWJC-4275 | IHC-P, WB | Mouse IgG1 | Human | CBMAB-C5632WJ |
| PD-1 | CBWJC-4274 | FC, IHC, Blocking | Mouse IgG1 | Human | CBMAB-C5631WJ |
| PD-1 | CBWJC-4273 | FC, ELISA | Mouse IgG1 | Human | CBMAB-C5630WJ |
| PD-1 | CBWJC-2356 | FC | Rat IgG2b | Mouse | CBMAB-C3302WJ |

# Prospect of Targeted Immunological Checkpoint Treatment

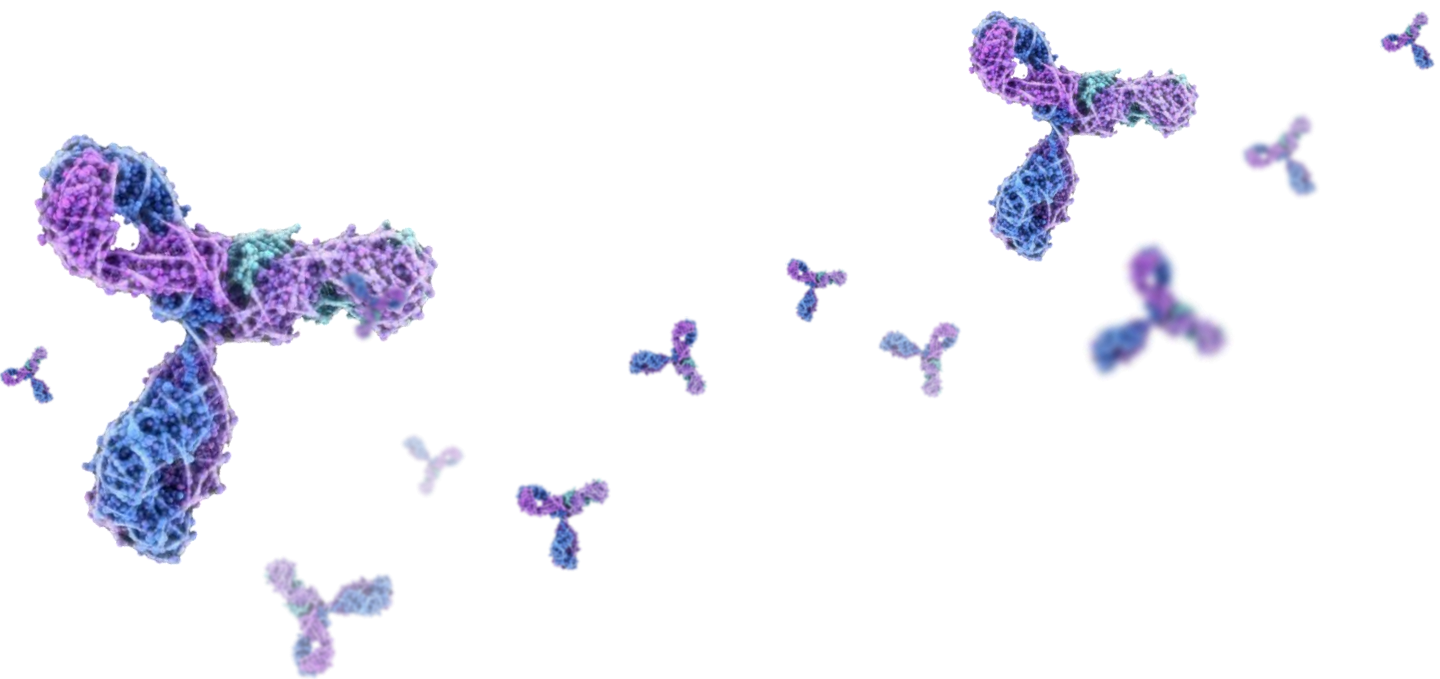
| Targets | Clone | Applications | Type | Species Reactivity | Cat. |
|---|---|---|---|---|---|
| IL-17A | 50101 | ELISA, WB | Rat IgG2a | Mouse | CBMAB-1355-YC |
| IL-17A | 17F3 | Neut | Mouse IgG1 | Mouse | CBMAB-1032-LY |
| IL-17A | D1X7L | WB, IP, FC | Rabbit IgG | Mouse, Rat | CBMAB-CP1151-LY |
| IL-17A | 3G5 | ELISA, WB | Mouse IgG2a | Human | CBMAB-A4360-LY |
| IL-17A | CBYY-I2074 | ELISA, LMNX | Mouse IgG1 | Human | CBMAB-I3244-YY |
| IL-17A | CBYY-I1865 | ELISpot, ELISA | Rat IgG1 | Mouse | CBMAB-I3035-YY |
| IL-17A | CBYY-I0952 | Neut, WB | Rat IgG2 | Mouse | CBMAB-I2120-YY |
| IL-17A | B-B51 | ELISA(Det), ELISpot, FuncS, Neut | Mouse IgG2b | Human | CBMAB-I1972-YY |
| IL-17A | 4k5F6 | WB, IHC-P, FC | Mouse IgG2a | Human | CBMAB-I1368-YY |
| IL-17A | CBYY-I0546 | WB, IP, FC | Rabbit IgG | Mouse, Rat | CBMAB-I1230-YY |
| IL-17A | CBFYH-3597 | ELISA, FC, WB | Mouse IgG2b | Human | CBMAB-H4151-FY |
| LAG-3 | C9B7W | Neut, FC | Rat IgG1 | Mouse | CBMAB-1047-LY |
| LAG-3 | E5S8V | WB | Rabbit IgG | Mouse | CBMAB-CP1332-LY |
| LAG-3 | T47-530 | FC | Mouse IgG1 | Human | CBMAB-C12005-LY |
| LAG-3 | CBXC-0821 | FC | Human IgG1 | Human | CBMAB-C3377-CQ |
| LAG-3 | CBYY-C2632 | FC | Rat IgG2b | Mouse | CBMAB-C4073-YY |
| LAG-3 | CBYY-C2631 | WB | Mouse IgG2a | Human | CBMAB-C4072-YY |

# Prospect of Targeted Immunological Checkpoint Treatment

| Targets | Clone | Applications | Type | Species Reactivity | Cat. |
|---|---|---|---|---|---|
| HAVCR2 | CBMW-H0539 | FC, WB | Mouse IgG1 | HAV | CBMAB-V208-0595-FY |
| HAVCR2 | CBMW-H0538 | FC, IP | Rat IgG1 | HAV | CBMAB-V208-0594-FY |
| HAVCR2 | CBMW-H0536 | WB, ELISA | Rat IgG2a | HAV | CBMAB-V208-0592-FY |
| HAVCR2 | CBXC-0907 | FC | Human IgG1 | Human, Primate | CBMAB-C2022-CQ |
| HAVCR2 | CBYY-C2531 | FC | Mouse IgG1 | Mouse | CBMAB-C3972-YY |
| HAVCR2 | CBYY-C0698 | FC, IHC, IP, FuncS | Rat IgG1 | Mouse | CBMAB-C2051-YY |
| HAVCR2 | CBYY-C0577 | FC, FuncS | Mouse IgG1 | Human | CBMAB-C1811-YY |
| HAVCR2 | RMT3-23 | FC, IF, IHC | Rat IgG2a | Mouse | CBMAB-T0384-YJ |
| HAVCR2 | CBYJT-1358 | FC, IHC, IP, WB | Rabbit IgG | Human | CBMAB-T0377-YJ |
| TIGIT | E6L7H | WB, IP | Rabbit IgG | Human | CBMAB-CP2771-LY |
| TIGIT | 13E7 | ELISA, IHC, WB | Mouse IgG1 | Human, Mouse | CBMAB-XB1141-YC |
| TIGIT | CBYJT-3145 | FC | Rat IgG2a | Mouse | CBMAB-T2416-YJ |
| TIGIT | CBYJT-3141 | FC, CyTOF | Mouse IgG2b | Human | CBMAB-T2412-YJ |
| TIGIT | CBYJT-3140 | FC | Mouse IgG3 | Human | CBMAB-T2411-YJ |
| B7-H3 | MJ18 | Blocking, FC | Rat IgG1 | Mouse | CBMAB-0957-LY |
| B7-H3 | 7B9 | ELISA | Mouse IgG1 | Human | CBMAB-A1251-LY |
| B7-H3 | 6E6 | ELISA | Mouse IgG2b | Human | CBMAB-A1251-LY |

# Prospect of Targeted Immunological Checkpoint Treatment

| Targets | Clone | Applications | Type | Species Reactivity | Cat. |
|---|---|---|---|---|---|
| TIGIT | SP206 | FC, WB | Rabbit IgG | Human, Mouse, Rat | CBMAB-C10156-LY |
| TIGIT | MIH35 | FC | Rat IgG2a | Mouse, Human | CBMAB-C10152-LY |
| LILRB4 | ZM4.1 | FC | Mouse IgG1 | Human | CBMAB-C12020-LY |
| LILRB4 | CBWJC-4124 | FC | Hamster IgG | Mouse | CBMAB-C5468WJ |
| LILRB4 | CBXC-0716 | FC | Human IgG1 | Human | CBMAB-C1830-CQ |
| LILRB4 | CBYY-I1349 | ELISA, WB | Mouse IgG2a | Human | CBMAB-I2519-YY |

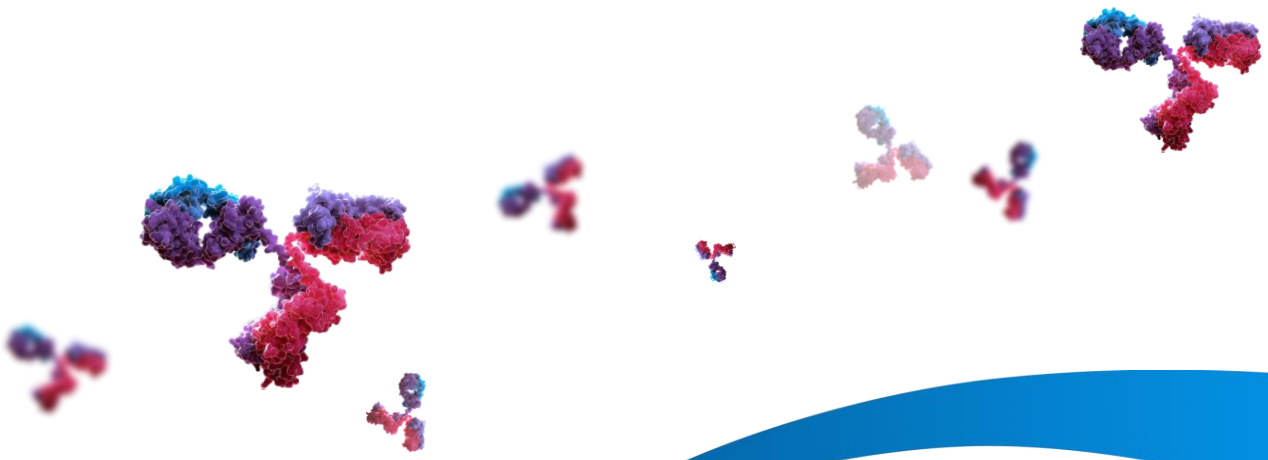


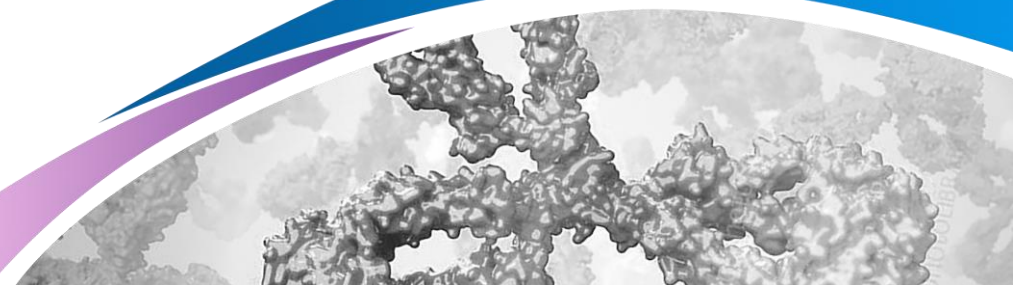
## About Us

Since 2004, Creative Biolabs has been working on the development of antibodies against to tumor markers and immunosuppressive targets.

At Creative Biolabs, we utilize advanced antibody research tools, professional technical support, and rapid global delivery to ensure the quality for scientific research workers and customers in industry. We believe that to build up a custom-service-centered business model is crucial for optimizing the drug development process, leveraging accessible resources, and gathering a team from various backgrounds to conduct drug discovery projects in the future.

As a preferred supplier for global customers, we are confident to provide you with first-class services covering a full range of applications. If you have any need for antibodies, please contact us.





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