



Bio X Cell

Your Trusted Supplier of *in vivo* MAbs

bioxcell.com



Your Trusted Supplier of *in vivo* MAbs

Accelerate your research from pilot to pre-clinical phases.

Rely on us to deliver the largest catalog of monoclonal antibodies formulated for *in vivo* use and provide customizable antibody production services - backed by over 25 years of experience.

'I am totally satisfied with the service Bio X Cell has given us. When anyone asks me for CTLA-4 antibodies, I always refer them to you. I look forward to another 20 years.'

- James P. Allison -
Corecipient of the 2018 Nobel Prize in Physiology or Medicine

Discover the Bio X Cell Advantages

Extensive Portfolio: Over 500 unique antibodies that are ultra-pure, low in endotoxin, and preservative-free.

Extensive Reference Library: Leverage nearly 20,000 product citations to craft your experiments more effectively.

Exceptional Product Quality: Our commitment to quality ensures reliable and reproducible results.

Competitive Pricing: We understand the importance of working within your research budget and offer competitive pricing.

Streamline your Supply Chain: Our products are always in stock, eliminating delays in your experiments.

Top-Tier Service & Support: Our teams of experts are dedicated to aid your project's success.

One-Year Guarantee: We stand behind the quality of our products, providing you with peace of mind as you focus on research.

Discover Faster: With Bio X Cell by your side, you can research with confidence and make immediate strides in your discoveries.

Product Categories



***InVivoMAb*™ Antibodies**

High-quality, high-purity antibodies to drive success in your *in vivo* and *in vitro* applications.



***InVivoSIM*™ Antibodies**

Study the biological effects of a drug with affordable research-grade biosimilar monoclonal antibodies.



***InVivoPlus*™ Antibodies**

Exceed strict demands and rigorous standards required for *in vivo* work at any research organization.



RecombiMAb™ Antibodies

Reduce immunogenicity in mouse models or humanized mouse models with our recombinant monoclonal antibodies.



Isotype Controls

Clearly identify antibody-specific signals with our isotype controls-delivered ready for *in vivo* administration.



***InVivoPure*™ Dilution Buffer**

Preserve antibody stability with buffers specifically formulated and tested for *in vivo* applications.

in vivo Antibody Features

Exceptional Purity: Ultra-pure antibody solution without added proteins, preservatives, or chemicals. Each lot is QC tested for purity using SDS-PAGE.

Pathogen Free: All *InVivoPlus*™ products are screened for an exhaustive panel of murine pathogens to help you adhere to IACUC and Animal Facility requirements.

Low Protein Aggregation: Antibody solution with low levels of protein aggregation. *InVivoPlus*™ products are QC tested for aggregate level and guaranteed to be <5% of the total protein.

Ultra-low Endotoxin Levels: We QC test the endotoxin level for each lot. The endotoxin levels of *InVivoMAb*™ products are < 2EU/mg and *InVivoPlus*™ products are < 1EU/mg.

Advanced Binding Validation: We utilize a library of recombinant proteins to validate that each lot of applicable *InVivoPlus*™ antibody binds strongly and specifically to its target antigen.

Matched Isotype Control Antibodies: We carry a wide selection of non-binding isotype control antibodies, taking the guesswork out of finding the correct control for your antibody.

Featured *InVivoMab™* and *InVivoPlus™* Antibodies

Our antibodies feature greater than 95% purity, ultra-low endotoxin levels, and are preservative, stabilizer, and carrier protein-free. They are used extensively in studying animal models of human diseases. With an ever-growing selection of functionally active, blocking, neutralizing, and agonistic antibodies, our products cover a wide range of research areas including **immuno-oncology**, **immunology**, **neuroscience** and more. Our products are cited in nearly 20,000 publications that detail a broad range of applications, including:

in vivo Applications

- Immune Checkpoint Blocking
- Mouse Cell Specific Depletion
- Cytokine Neutralization
- Agonistic / Cell Activation
- Receptor Blocking

in vitro Applications

- Functional Assays
- Neutralization Assays
- Cell-based Assays

Protein Detection

- WB, IP, IHC, IF, FC, ELISA

Antigen	Reactivity	Application	Clone	Catalog #	Isotype Control
CD3ε	Mo	<i>in vivo</i> T cell depletion, <i>in vitro</i> T cell stimulation/activation, IF, FC, WB	145-2C11	BP0001	BP0091
CD4	Mo	<i>in vivo</i> CD4+ T cell depletion	YTS 191	BE0119	BE0090
CD8α	Mo	<i>in vivo</i> CD8+ T cell depletion, WB	2.43	BP0061	BP0090
CD8β	Mo	<i>in vivo</i> CD8+ T cell depletion, <i>in vitro</i> CD8 blockade, IF	53-5.8	BE0223	BE0088
CD16/CD32	Mo	<i>in vitro</i> Fc receptor blocking, <i>in vivo</i> Fc receptor blocking	2.4G2	BP0307	BP0090
CD19	Mo	<i>in vivo</i> B cell depletion, <i>in vivo</i> CD19 neutralization, <i>in vitro</i> B cell negative selection, FC	1D3	BE0150	BE0089
CD20	Mo	<i>in vivo</i> B cell depletion, WB	MB20-11	BP0356	BP0366
CD25	Mo	<i>in vivo</i> regulatory T cell depletion, FC	PC-61.5.3	BP0012	BP0088
CD47	Hu, Mo, Rt	<i>in vivo</i> CD47 blockade, <i>in vitro</i> CD47 blocking, IF	MIAP410	BP0283	BP0083
CD71	Mo	<i>in vivo</i> depletion of CD71+ cells	R17 217.1.3/TIB-219	BP0175	BP0089
CTLA-4	Mo	<i>in vivo</i> CTLA-4 neutralization, WB	9D9	BP0164	BP0086
CTLA-4	Mo	<i>in vivo</i> CTLA-4 neutralization, <i>in vitro</i> CTLA-4 neutralization, WB	9H10	BP0131	BP0087
IFNAR-1	Mo	<i>in vivo</i> IFNAR-1 blockade, <i>in vitro</i> IFNAR-1 blockade, WB	MAR1-5A3	BP0241	BP0083
IFNγ	Mo	<i>in vivo</i> IFNγ neutralization, <i>in vitro</i> IFNγ neutralization, ELISPOT, FC, WB	XMG1.2	BP0055	BP0088
IL-1β	Mo, Rt	<i>in vivo</i> IL-1β neutralization, <i>in vitro</i> IL-1β neutralization, ELISA	B122	BE0246	BE0091
IL-4	Mo	<i>in vivo</i> IL-4 neutralization, <i>in vitro</i> IL-4 neutralization, <i>in vivo</i> IL-4 receptor stimulation, FC, WB	11B11	BP0045	BP0088
IL-6	Mo	<i>in vivo</i> IL-6 neutralization, <i>in vitro</i> IL-6 neutralization	MP5-20F3	BE0046	BE0088
IL-10R	Mo	<i>in vivo</i> blocking of IL-10/IL-10R signaling, <i>in vitro</i> blocking of IL-10R signaling, FC, WB	1B1.3A	BP0050	BP0088
IL-12 p40	Mo	<i>in vivo</i> IL-12p40 neutralization, p40 affinity chromatography, IP, ELISA, FC, WB	C17.8	BP0051	BP0089
IL-17A	Mo	<i>in vivo</i> IL-17A neutralization	17F3	BP0173	BP0083
LAG-3	Mo	<i>in vivo</i> LAG-3 neutralization, <i>in vitro</i> LAG-3 neutralization, FC, WB	C9B7W	BP0174	BP0088
LPAM-1	Mo	<i>in vivo</i> Integrin α4β7 neutralization, FC	DATK32	BE0034	BE0089
Ly6G/Ly6C	Mo	<i>in vivo</i> depletion of Gr-1+ myeloid cells, FC, IHC-P, IHC-F	RB6-8C5	BP0075	BP0090
MHC Class I	Hu	Functional assays	W6/32	BP0079	BP0085
NK1.1	Mo	<i>in vivo</i> NK cell depletion, FC	PK136	BP0036	BP0085
OX40	Mo	<i>in vivo</i> OX40 activation, <i>in vitro</i> OX40 activation, WB	OX-86	BP0031	BP0088
PD-1	Mo	<i>in vivo</i> blocking of PD-1/PD-L signaling	RMP1-14	BP0146	BP0089
PD-1	Mo	<i>in vivo</i> blocking of PD-1/PD-L signaling, <i>in vitro</i> PD-1 neutralization, IHC-F, IF, WB, FC	29F1A12™	BP0273	BP0089
PD-L1	Mo	<i>in vivo</i> PD-L1 blockade, IF, IHC-F, FC, WB	10F9G2™	BP0101	BP0090
TGF-β	Hu, Mo, Rt	<i>in vivo</i> TGFβ neutralization, <i>in vitro</i> TGFβ neutralization, WB	1D11.16.8	BP0057	BP0083
TNFα	Mo	<i>in vivo</i> TNFα neutralization, <i>in vitro</i> TNFα neutralization, WB	XT3.11	BP0058	BP0088
VEGFR-2	Mo	<i>in vivo</i> blocking of VEGF/VEGFR-2 signaling, <i>in vitro</i> blocking of VEGFR signaling, WB	DC101	BP0060	BP0088

Discover The *InVivoPlus™* Difference

The *InVivoPlus™* versions of our products are structurally and functionally identical to the *InVivoMab™* versions. The difference lies in a superior level of quality that will meet or exceed the strict demands and rigorous standards required for *in vivo* work at any research organization.

*Binding validation is performed for each lot for all applicable *InVivoPlus™* products. Non-applicable *InVivoPlus™* products include antibodies for which an antigen is not commercially available and non-reactive isotype control antibodies.

† Murine pathogen screening includes: Mycoplasma including M. pulmonis, M. arginini, M. fermentans, M. hominis, M. hyorhinis, M. orale, M. pirum, M. salivarium, M. agassizii, M. cynos and others. Murine norovirus (MNV), murine parvovirus (MPV) 1, 2, 3, 4, and 5, murine minute virus (MMV/MVM), murine hepatitis virus (MHV), murine reovirus (REO) type 1, 2, and 3, lymphocytic choriomeningitis virus (LCMV), lactate dehydrogenase elevating virus (LDV), murine rotavirus MRV/EDIM), Theiler's murine encephalomyelitis virus (TMEV), ectromelia virus (ECTRO), hantavirus (HANTA), polyoma virus (POLY), murine adenovirus (detects and differentiates MAD1 and MAD2), sendai virus (SEND), pneumonia virus of mice (PVM), murine cytomegalovirus (MCMV) 1 and 2 (MCMV), and K virus.

	<i>InVivoMab™</i>	<i>InVivoPlus™</i>
Binding Validation* Determined by immunoblot, flow cytometry, or ELISA	No	Yes
Murine Pathogen Screening† Determined by ultrasensitive real-time PCR	No	Yes
Antibody Aggregation Screening Determined by Size Exclusion Chromatography (SEC)	No	Yes
Endotoxin Determined by LAL gel clotting assay	<2EU/mg	<1EU/mg
Purity Determined by SDS-PAGE	>95%	>95%
Preservative, stabilizer and carrier protein free	Yes	Yes
Formulated for <i>in vivo</i> use	Yes	Yes
Catalog number format	Begins with BE	Begins with BP

Featured *InVivoSIM™* Biosimilar Antibodies

The *InVivoSIM™* research-grade biosimilar antibodies have the same variable region sequences as the original therapeutic antibodies. Biosimilars make it possible to study the biological effects of a drug without the need to source an expensive pharmaceutical-grade therapeutic. They are an excellent choice for use as standard of care/therapeutic benchmarks in functional assays, pharmacokinetic assays, and *in vivo* studies in xenograft and humanized mouse models. [Learn more at: bioxcell.com/biosimilars](https://www.bioxcell.com/biosimilars)

Product Name	Application	Catalog Number	Isotype Control
InVivoSIM™ anti-human C5 (Eculizumab Biosimilar)	Inhibition of the activation of C5, Functional assays, ELISA, IP	SIM0011	CP147
InVivoSIM™ anti-human CD20 (Rituximab Biosimilar)	FC, ELISA, WB	SIM0008	BP0297
InVivoSIM™ anti-human CTLA-4 (Ipilimumab Biosimilar)	<i>in vivo</i> CTLA-4 neutralization, FC, ELISA, WB	SIM0004	BP0297
InVivoSIM™ anti-human EGFR (Cetuximab Biosimilar)	<i>in vitro</i> EGFR blockade, EGFR blockade, ELISA, FC	SIM0002	BP0297
InVivoSIM™ anti-human HER2 (Trastuzumab Biosimilar)	FC, ELISA, IHC, WB	SIM0005	BP0297
InVivoSIM™ anti-human HER2 (Pertuzumab Biosimilar)	Reported Applications, Functional assays, ELISA, Neutralization	SIM0019	BE0297
InVivoSIM™ anti-human IgE (Omalizumab Biosimilar)	IgE neutralization, FC, ELISA	SIM0016	BP0297
InVivoSIM™ anti-human IL-12 p40 (Ustekinumab Biosimilar)	Functional assays	SIM0020	BP0297
InVivoSIM™ anti-human IL-17A (Secukinumab Biosimilar)	Functional assays, ELISA,IHC, IHC, FC	SIM0013	BP0297
InVivoSIM™ anti-human IL-6R (Tocilizumab Biosimilar)	Functional assays, ELISA	SIM0014	BP0297
InVivoSIM™ anti-human LAG-3 (Relatlimab Biosimilar)	ELISA	SIM0015	CP147
InVivoSIM™ anti-human NGF (Tanezumab Biosimilar)	NGF neutralization, ELISA	SIM0017	BP0301
InVivoSIM™ anti-human PD-1 (Nivolumab Biosimilar)	Blocking of PD-1/PD-L signaling, FC, IHC, WB	SIM0003	CP147
InVivoSIM™ anti-human PD-1 (Pembrolizumab Biosimilar)	<i>in vivo</i> Blocking of PD-1/PD-L signaling, Functional assays	SIM0010	CP147
InVivoSIM™ anti-human PD-L1 (Atezolizumab Biosimilar)	<i>in vitro</i> PD-L1 blockade, FC, WB	SIM0009	BP0297
InVivoSIM™ anti-human PD-L1 (Avelumab Biosimilar)	<i>in vitro</i> PD-L1 blockade, Functional assays, ELISA	SIM0021	CP169
InVivoSIM™ anti-human TNFα (Adalimumab Biosimilar)	TNFα neutralization, FC, ELISA,IHC, IP, IHC, WB	SIM0001	BP0297
InVivoSIM™ anti-human TNFα (Infliximab Biosimilar)	<i>in vitro</i> TNFα neutralization, FC, ELISA, WB	SIM0006	BP0297
InVivoSIM™ anti-human VEGF (Bevacizumab Biosimilar)	VEGF neutralization, FC, ELISA, IP, WB	SIM0007	BP0297
InVivoSIM™ anti-human VEGFR-2 (Ramucirumab Biosimilar)	Functional assays, IHC, FC	SIM0012	BP0297

Featured RecombiMAb™ Recombinant Antibodies

RecombiMAb™ antibodies use mouse or human IgG constant regions instead of the typical rat or hamster IgG constant regions, resulting in improved *in vivo* activity and reduced immunogenicity in mouse and humanized mouse models. In some syngeneic mouse tumor models, particularly in BALB/c mice, repeated rat or hamster IgG administration can result in complications from hypersensitivity reactions. Using the RecombiMAb™ antibody instead of wild-type clones may reduce antibody immunogenicity and alleviate hypersensitivity reactions. RecombiMAb™ antibodies also overcome the limitations of traditionally manufactured antibodies by ensuring high lot-to-lot consistency and data reproducibility across experiments. [Learn more at: bioxcell.com/recombimab](https://www.bioxcell.com/recombimab)

Antigen	Reac-tivity	Host / Isotype	Mutation(s)	Application(s)	Clone	Catalog Number	Isotype Control
CD4	Mo	Mo, IgG2b, κ		<i>in vivo</i> CD4+ T cell depletion, FC, WB	GK1.5-CP127	CP127	BP0086
CD8α	Mo	Mo, IgG2b, κ		<i>in vivo</i> CD8+ T cell depletion, WB	2.43-CP128	CP128	BP0086
CD8α	Mo	Mo, IgG2a, κ		<i>in vivo</i> CD8+ T cell depletion, WB	YTS 169.4-CP134	CP134	BP0085
CD16/CD32	Mo	Mo, IgG2a		<i>in vitro</i> Fc receptor blocking, <i>in vivo</i> Fc receptor blocking	2.4G2-CP025	CP025	BP0085
CD40	Mo	Mo, IgG2a, κ		<i>in vivo</i> CD40 activation, <i>in vitro</i> B cell stimulation/activation	FGK4.5-CP133	CP133	BP0085
CD71 (TfR1)	Mo	Mo, IgG2a κ		<i>in vivo</i> depletion of CD71+ cells	R17 217.1.3-CP130	CP130	BP0085
CSF1R (CD115)	Mo	Mo, IgG2a, κ		<i>in vivo</i> macrophage & monocyte depletion, <i>in vitro</i> CSF1R neutralization, FC, WB	AFS98-CP131	CP131	BP0085
CTLA-4 (CD152)	Mo	Mo, IgG1, κ		<i>in vivo</i> CTLA-4 neutralization, <i>in vitro</i> CTLA-4 neutralization, WB	9H10-CP146	CP146	BP0083
CTLA-4 (CD152)	Mo	Mo, IgG1		<i>in vivo</i> CTLA-4 neutralization, WB	9D9-CP006	CP006	BP0083
LAG-3	Mo	Mo, IgG2a		<i>in vivo</i> LAG-3 neutralization, <i>in vitro</i> LAG-3 neutralization, FC, WB	C9B7W-CP014	CP014	BP0085
OX40 (CD134)	Mo	Mo, IgG2a		<i>in vivo</i> OX40 activation, <i>in vitro</i> OX40 activation, WB	OX86-CP017	CP017	BP0085
PD-1 (CD279)	Mo	Mo, IgG2a, κ	D265A	<i>in vivo</i> blocking of PD-1/PD-L signaling	RMP1-14-CP151	CP151	CP150
PD-1 (CD279)	Mo	Mo, IgG2a, κ	L234A, L235A, P329G (LALA-PG)	<i>in vivo</i> blocking of PD-1/PD-L signaling	RMP1-14-CP153	CP153	CP150
PD-1 (CD279)	Mo	Mo, IgG2a, κ		<i>in vivo</i> blocking of PD-1/PD-L signaling	RMP1-14-CP157	CP157	BP0085
PD-1 (CD279)	Mo	Mo, IgG1, κ		<i>in vivo</i> blocking of PD-1/PD-L signaling, <i>in vitro</i> PD-1 neutralization, IHC-F, FC, WB	29F.1A12-CP159	CP159	BP0083
PD-1 (CD279)	Mo	Mo, IgG1, κ		<i>in vivo</i> blocking of PD-1/PD-L signaling	RMP1-14-CP162	CP162	BP0083
PD-1 (CD279)	Mo	Mo, IgG1		<i>in vivo</i> blocking of PD-1/PD-L signaling, <i>in vitro</i> PD-1 neutralization, IHC-F, IF, WB, FC	29F.1A12-CP004	CP004	BP0083
PD-L1 (B7-H1)	Mo	Mo, IgG1, κ		<i>in vivo</i> PD-L1 blockade, IF, IHC (frozen), FC	10F.9G2-CP168	CP168	BP0083
VEGFR-2	Mouse	Mo, IgG2a, κ		<i>in vivo</i> blocking of VEGF/VEGFR-2 signaling, <i>in vitro</i> blocking of VEGFR signaling, WB	C101-CP132	CP132	BP0085

Contract Services

Enlist the Experts at Bio X Cell for Antibody Production Services

At Bio X Cell, we know that growing hybridoma cells and purifying antibodies in large quantities with low endotoxin levels can be technically challenging and extremely time-consuming. Our optimized fermentation process allows us to scale up antibody production from milligrams to grams much faster than traditional methods. A technical project manager will guide you through the process, providing recommendations and updates along the way. We know that research moves at a rapid and precise pace, and we aim to partner with you to achieve your goals faster.

To discuss your contract services projects, please reach us at contractservices@bioxcell.com

- 25+ years of expertise
- Customizable services
- Low endotoxin levels
- Fast turnaround time
- Ultra-high purity
- Large scale production

Antibody Production Services: We know that growing hybridoma cells and purifying antibodies can be technically challenging and time-consuming. Enlist our experts to do this for you so you can focus on your research.

Antibody Conjugation Services: Gain access to a wide selection of antibodies and labels. Quickly get high-quality conjugated antibodies ready and specific for your application - saving you time and cost.

Transient Expression Services: Large scale transient recombinant antibody expression services with fast turnaround time to support your *in vivo* and *in vitro* studies.

Cell Freezing and Storage: Optimal storage that you can trust. We have optimized processes to create master and working cell banks to ensure your cells are safe and readily available for scale-up.

Murine Pathogen Testing: We use ultra-sensitive qPCR to screen for a multitude of murine pathogens, ensuring that the antibodies you are using for *in vivo* research will meet all requirements of your research facility.

Mycoplasma Testing: Don't let mycoplasma jeopardize your valuable cell line. We offer services to reliably detect mycoplasma and restore your cells to a usable state to keep your projects on track.



Impacting the World Beyond Antibodies

Building a Green and Sustainable Business

At Bio X Cell we are committed to advancing our mission with minimal environmental impact. Our employee advisory committee convenes regularly to explore the ways in which we can go green as a company. In 2020, we transitioned to 100% curbside-recyclable packaging for outbound shipments. This eco-friendly alternative to Styrofoam retains optimal thermal properties during shipping and saves thousands of pounds of waste annually. In 2023, we installed both ground and rooftop solar arrays at our headquarters. By harnessing sunlight and transforming it into a sustainable energy source, we are significantly reducing our carbon footprint and contributing to a cleaner environment.

Our Philanthropy

The Bio X Cell team is driven by a shared passion to give back to our community and enhance the lives of those around us. In 2019, we launched the Bio X Cell Fund, a philanthropic initiative driven by our employees and managed in partnership with the New Hampshire Charitable Foundation. The BioFund supports organizations dedicated to mental and physical health, environmental conservation, arts and culture. We also reserve funds for humanitarian aid and disaster relief efforts. We have actively raised additional dollars for various foundations, including The Prouty, which supports the Dartmouth Cancer Center, and the Breast Cancer Research Foundation. These gifts have supported lifesaving medical research and essential patient support services. The positive impact we create in our community gives us greater meaning in our work at Bio X Cell and fulfills us as individuals.



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