

Technical Data Sheet

InVivoMAb anti-human MHC class II (HLA-DP)



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Lot Specific Information

Lot Number: Lot Specific*
Volume: Lot Specific*
Concentration: Lot Specific* (generally 4 to 11 mg/ml) *
Total Protein: Lot Specific*

*This information will be noted on the certificate of analysis that ships with this product.

Product Website Link: <https://bioxcell.com/invivomab-anti-human-mhc-class-ii-hla-dp-be0502>

Product Information

Catalog Number: BE0502
Clone: B7/21
Isotype: Mouse IgG3, κ
Recommended Isotype Control(s): InVivoMAb polyclonal mouse IgG
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer
Immunogen: Human pre-B-cell leukemic cell line Nalm-6
Reported Applications: Immunopeptidomics
Immunoprecipitation
in vitro blocking of HLA-DP
in vitro functional assays
Flow cytometry
Immunohistochemistry (frozen)
ELISA
Formulation: PBS, pH 7.0
Contains no stabilizers or preservatives
Endotoxin: $\leq 1\text{EU/mg}$ ($\leq 0.001\text{EU}/\mu\text{g}$)
Determined by LAL assay
Purity: $\geq 95\%$
Determined by SDS-PAGE
Sterility: $0.2\ \mu\text{m}$ filtration
Production: Purified from cell culture supernatant in an animal-free facility
Purification: Protein A
Molecular Weight: 150 kDa

Description

The B7/21 monoclonal antibody reacts with human leukocyte antigen-DP (HLA-DP), a member of the HLA class II, or major histocompatibility complex (MHC) class II antigens in humans. The B7/21 antibody recognizes a pan-human monomorphic determinant present on cells expressing at least five HLA-DP specificities (HLA-DP1, -DP2, -DP3, -DP4, and -DP5) and does not bind to other HLA-II molecules (i.e., HLA-DR or HLA-DQ). HLA-DP is expressed at varying levels on B cells, monocytes, macrophages, dendritic cells (DCs), activated T cells, and tumor cell lines, including B cell lines, myelomas, and some myeloid leukemias. As a classical HLA class II heterodimeric molecule, HLA-DP contains two noncovalently linked type I transmembrane glycoprotein chains, DP α (~34 kDa) and DP β (~26–28 kDa), encoded by the polymorphic DPA1 and DPB1 loci, respectively. HLA-DP is involved in the antigen presentation of extracellularly derived peptides to CD4⁺ T lymphocytes, and it regulates helper T cell responses, tolerance, and alloimmunity. HLA-DP disparities strongly correlate with increased risk of acute graft-versus-host disease, and its role in broader immune regulation further underscores its functional significance in the human immune system.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/invivomab-anti-human-mhc-class-ii-hla-dp-be0502?utm_source=cr9k1b#tab_references or scan the QR code below.



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