Technical Data Sheet

InVivoMAb anti-human pan MHC Class II (HLA II)

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at https://bioxcell.com/terms-and-conditions.

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 Information

Catalog Number:	**BE0452**
Clone:	**IVA12**
Isotype:	Mouse IgG1, κ
Recommended Isotype Control(s):	InVivoMAb mouse IgG1 isotype control, unknown specificity
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Priess human B cell line
Reported Applications:	*in vitro* blocking of MHC-II MHC-II immunopeptidomics Immunohistochemistry (paraffin) Immunohistochemistry (frozen) Immunohistochemistry (free floating) Flow cytometry Immunofluorescence Immunoprecipitation
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	<2EU/mg (<0.002EU/µg) Determined by LAL gel clotting assay
Purity:	>95% Determined by SDS-PAGE
Sterility:	0.2 µm filtered
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
Molecular Weight:	150 kDa

Description

The IVA12 monoclonal antibody recognizes human HLA-II (i.e., HLA-DR, HLA-DP, and HLA-DQ), often referred to as a pan HLA-II or pan MHC-II antibody. This antibody shows cross-reactivity with guinea pig MHC class II. Professional antigen-presenting cells, such as DCs, B cells, macrophages/monocytes, and thymic epithelial cells, constitutively express MHC class II molecules [human leukocyte antigen (HLA) in humans], while its expression can be experimentally stimulated by IFNγ in various cell types. MHC class II molecules are antigen-presenting molecules for CD4+ T cells. Self/non-self proteins undergo proteolytic cleavage, generating antigenic peptides that bind to MHC class II molecules to form complexes. CD4+ T cells identify peptide-MHC II complexes, undergo activation, and subsequently develop into T helper cell (Th) subsets. Additionally, the MHC Class II is critical for B cell activation, proliferation, and differentiation during cognate B cell-Th cell interaction. The IVA12 antibody can be used for immune cell function-related mechanistic experiments involving in vitro blockade of MHC-II and the immunopeptidomics of peptide-MHC-II complexes in various pathophysiological conditions.

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/be0452?bxcs=9k1b3a#tab_references or scan the QR code below.

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