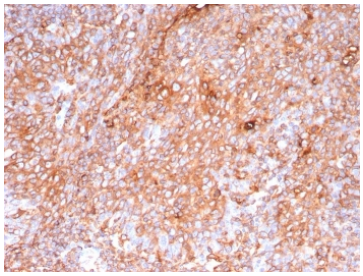
Pan-HLA Class II Antibody HLA-Pan/9268R / HLA-DP/DQ/DR Antibody [clone HLA-Pan/9268R] (V5421)

Catalog No.	Formulation	Size
V5421-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5421-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5421SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

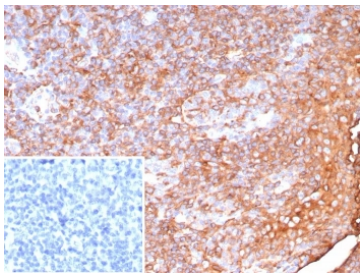
Recombinant RABBIT MONOCLONAL

Bulk quote request

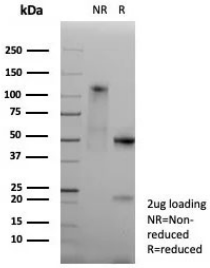
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	HLA-Pan/9268R
Purity	Protein A/G affinity
UniProt	P04440, P01908, P01909, P01920, P01903
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This recombinant HLA-DP/DQ/DR antibody is available for research use only.



IHC staining of FFPE human tonsil tissue with recombinant HLA-DP/DQ/DR antibody (clone HLA-Pan/9268R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human tonsil tissue with recombinant HLA-DP/DQ/DR antibody (clone HLA-Pan/9268R). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free recombinant HLA-DP/DQ/DR antibody (HLA-Pan/9268R) as confirmation of integrity and purity.

Description

Pan-HLA Class II Antibody HLA-Pan/9268R / HLA-DP/DQ/DR Antibody recognizes the human MHC class II molecules HLA-DP, HLA-DQ and HLA-DR. These proteins are key components of the antigen-presentation pathway and enable immune cells to display processed peptides for recognition by CD4-positive T lymphocytes. Through this interaction, HLA class II molecules contribute to helper T cell activation and the coordination of antigen-specific immune responses.

The classical HLA class II proteins are heterodimers consisting of alpha and beta transmembrane chains. Their extracellular domains form a peptide-binding groove that accommodates peptides generated during intracellular processing of internalized proteins. Following peptide loading, stable HLA class II complexes are transported to the cell surface, where the combination of HLA molecule and bound peptide can be surveyed by T cell receptors.

Expression of HLA-DP, HLA-DQ and HLA-DR is closely associated with professional antigen-presenting cells. B lymphocytes, dendritic cells and macrophages use MHC class II molecules to communicate antigenic information to helper T cells, while inflammatory cytokines can induce or enhance class II expression in other cell populations. Regulation of this pathway influences both the magnitude and character of adaptive immune responses.

Broad HLA class II detection can be particularly useful when total MHC class II expression is of greater interest than the contribution of an individual DP, DQ or DR locus. Because the three classical HLA class II groups differ in polymorphism, expression and peptide-binding properties, pan-HLA and locus-specific antibodies provide complementary approaches to studying this system. HLA class II biology is relevant to transplantation, autoimmune disease, infection, inflammation and tumor immune recognition.

Clone HLA-Pan/9268R is a recombinant rabbit monoclonal antibody characterized for recognition of human HLA-DP, HLA-DQ and HLA-DR. NSJ Bioreagents provides this Pan-HLA Class II Antibody for research into MHC class II expression and antigen presentation. An HLA-DP/DQ/DR Antibody can support investigation of broad class II expression and the cellular interactions underlying CD4 T cell-mediated immunity.

For additional information on HLA class II biology and complementary antibody validation, visit our HLA-DP/DQ/DR Antibody CR3/43 / MHC Class II Antibody page.

Application Notes

Optimal dilution of the recombinant HLA-DP/DQ/DR antibody should be determined by the researcher.

Immunogen

The Priess human B cell line was used as the immunogen for the recombinant HLA-DP/DQ/DR antibody.

Storage

Aliquot the recombinant HLA-DP/DQ/DR antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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