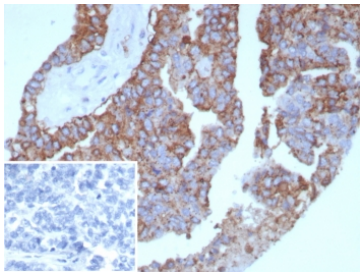
Pan-HLA Class II Antibody rHLA-Pan/8847 / HLA-DP/DQ/DR Antibody [clone rHLA-Pan/8847] (V5135)

Catalog No.	Formulation	Size
V5135-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5135-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5135SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

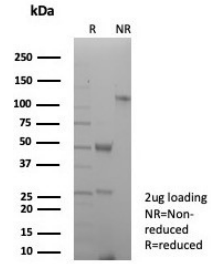
Recombinant MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rHLA-Pan/8847
Purity	Protein A/G affinity
UniProt	P04440, P01908, P01909, P01920, P01903
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Pan-HLA antibody is available for research use only.



IHC staining of FFPE human ovarian cancer tissue with Pan-HLA antibody (clone rHLA-Pan/8847). Inset: PBS instead of primary, secondary negative control.



SDS-PAGE analysis of purified, BSA-free Pan-HLA antibody (clone rHLA-Pan/8847) as confirmation of integrity and purity.

Description

Pan-HLA Class II Antibody rHLA-Pan/8847 / HLA-DP/DQ/DR Antibody recognizes a common determinant of the classical human MHC class II molecules HLA-DP, HLA-DQ and HLA-DR. These cell-surface glycoproteins are central to adaptive immunity, where they present processed antigenic peptides to CD4-positive T lymphocytes. Recognition of peptide-MHC class II complexes by T cell receptors helps initiate antigen-specific helper T cell responses and coordinates communication between innate and adaptive immune cells.

HLA-DP, HLA-DQ and HLA-DR are heterodimeric proteins composed of non-covalently associated alpha and beta chains. Their extracellular domains combine to form the peptide-binding groove characteristic of MHC class II molecules. Peptides generated primarily through endosomal processing are loaded into this groove before stable peptide-HLA complexes are transported to the cell surface. The resulting complexes enable CD4-positive T cells to survey antigens captured and processed by antigen-presenting cells.

MHC class II expression is characteristic of professional antigen-presenting cells, including B lymphocytes, dendritic cells and macrophages. Expression can also be induced in additional cell types in response to inflammatory signals such as interferon gamma. The abundance and distribution of HLA class II molecules can therefore reflect both cellular identity and immune activation, making these proteins important markers in studies of antigen-presenting cell populations and immune responses.

Broad recognition of HLA-DP, HLA-DQ and HLA-DR provides a means of examining overall HLA class II expression without restricting detection to a single locus. This approach complements antibodies directed specifically against DP, DQ or DR when the research objective is characterization of the broader MHC class II-positive cell population. HLA class II expression is studied in infectious disease, autoimmunity, transplantation, inflammation and cancer immunology.

Clone rHLA-Pan/8847 is a recombinant mouse monoclonal antibody characterized for broad recognition of human HLA-DP, HLA-DQ and HLA-DR. NSJ Bioreagents provides this Pan-HLA Class II Antibody for research into antigen-presenting cells, MHC class II expression and adaptive immunity. An HLA-DP/DQ/DR Antibody can support studies examining broad HLA class II expression and CD4 T cell-mediated immune recognition.

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 Pan-HLA antibody should be determined by the researcher.

Immunogen

Priess cells (a human B cell line) were used as the immunogen for the Pan-HLA antibody.

Storage

Aliquot the Pan-HLA antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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