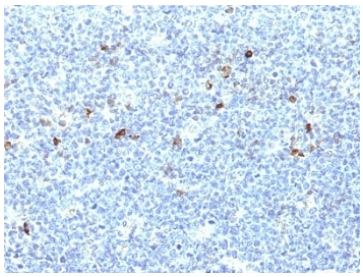
HLA-Aw32 + HLA-A25 Antibody CATA-1 / HLA-A Antibody [clone CATA-1] (V2572)

Catalog No.	Formulation	Size
V2572-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2572-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2572SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2572IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Citations (7)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	CATA-1
Purity	Protein G affinity chromatography
UniProt	P30443
Localization	Cell surface
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This HLA-Aw32 + HLA-A25 Antibody CATA-1 / HLA-A Antibody is available for research use only.



HLA-Aw32 + HLA-A25 Antibody CATA-1 in Human Tonsil IHC. Immunohistochemistry testing of clone CATA-1 in FFPE human tonsil tissue. HIER was performed by boiling tissue sections in 10 mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min. Distinct HLA-Aw32/HLA-A25 immunoreactivity is observed in a scattered population of cells within the tonsillar lymphoid tissue, contrasting with the largely unstained surrounding cells.

Description

HLA-Aw32 + HLA-A25 Antibody CATA-1 / HLA-A Antibody recognizes a shared antigenic determinant expressed by the HLA-Aw32 and HLA-A25 major histocompatibility complex class I antigens. HLA-A is one of the classical human leukocyte antigen class I loci, together with HLA-B and HLA-C. HLA class I molecules are highly polymorphic cell-surface glycoproteins responsible for presenting intracellularly derived peptides to CD8-positive T lymphocytes. This process enables immune surveillance of cellular protein expression and contributes to recognition of infected, transformed or otherwise abnormal cells.

HLA-A molecules consist of a polymorphic transmembrane heavy chain non-covalently associated with beta-2 microglobulin. The extracellular portion of the heavy chain contains alpha-1, alpha-2 and alpha-3 domains, with the alpha-1 and alpha-2 domains forming the peptide-binding groove. Peptides generated from intracellular proteins are transported into the endoplasmic reticulum, loaded onto newly assembled MHC class I complexes and subsequently displayed at the cell surface for recognition by cytotoxic T cells.

HLA-A25 and HLA-A32 are serologically defined HLA-A specificities. The historical designation HLA-Aw32 corresponds to the HLA-A32 antigen group, while modern HLA nomenclature further resolves these serological groups into individual alleles. Because HLA molecules exhibit extensive polymorphism, antibodies recognizing defined HLA determinants have been useful in studies of histocompatibility, HLA phenotyping, transplantation and immune recognition.

Clone CATA-1 was originally characterized as a monoclonal antibody reacting with cells expressing either HLA-A25 or HLA-Aw32. Absorption studies demonstrated that the antibody recognizes a determinant shared by these two HLA-A antigens, distinguishing its specificity from antibodies directed broadly against all HLA-A molecules. CATA-1 has subsequently been used in published research involving HLA antigen expression and immunological characterization.

Clone CATA-1 is a mouse monoclonal antibody directed against HLA-Aw32 and HLA-A25. NSJ Bioreagents provides this HLA-Aw32 + HLA-A25 Antibody for research into HLA polymorphism, MHC class I biology and immune recognition. An HLA-A Antibody recognizing defined HLA-A determinants can support investigation of histocompatibility and the molecular diversity underlying human antigen presentation.

Explore our Immunology Antibodies page for additional reagents targeting HLA molecules, antigen presentation and adaptive immune recognition.

Application Notes

Optimal dilution of the HLA-Aw32 + HLA-A25 Antibody CATA-1 / HLA-A Antibody should be determined by the researcher.

1. Staining of formalin/paraffin tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Normal human peripheral blood lymphocytes of phenotype A1, Aw32, B7, B37, Cw-, Cw-, DR2, and DRw10 were used as the immunogen for the HLA-Aw32 + HLA-A25 Antibody CATA-1.

Storage

Store the HLA-Aw32 + HLA-A25 Antibody CATA-1 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

HLA-Aw32 antibody, HLA-A25 antibody, HLA-A antibody, HLA-A32 antibody, HLA-A25 antibody, MHC Class I antibody

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