10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HLA-Aw32 & HLA-A25 (MHC I) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone CATA-1]
Catalog # AH11405

Product Information

Application	IHC, IF, FC
Primary Accession	P01889
Other Accession	3105, 181244, 654404, 77961, P30443, P30499
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2a, kappa
Clone Names	CATA-1
Calculated MW	40460

Additional Information

Gene ID	3106
Other Names	HLA class I histocompatibility antigen, B-7 alpha chain, MHC class I antigen B*7, HLA-B, HLAB
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	HLA-Aw32 & HLA-A25 (MHC I) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HLA-B (HGNC:4932)
Synonyms	HLAB
Function	Antigen-presenting major histocompatibility complex class I (MHCI) molecule. In complex with B2M/beta 2 microglobulin displays primarily viral and tumor-derived peptides on antigen-presenting cells for recognition by alpha-beta T cell receptor (TCR) on HLA-B-restricted CD8-positive T cells, guiding antigen-specific T cell immune response to eliminate infected or transformed cells (PubMed:23209413, PubMed:25808313, PubMed:29531227, PubMed:9620674). May also present self-peptides derived from the signal sequence of secreted or membrane proteins, although T cells specific for these peptides are usually inactivated to prevent autoreactivity (PubMed:18991276, PubMed:7743181). Both the peptide and the MHC

	molecule are recognized by TCR, the peptide is responsible for the fine specificity of antigen recognition and MHC residues account for the MHC restriction of T cells (PubMed:24600035, PubMed:29531227, PubMed:9620674). Typically presents intracellular peptide antigens of 8 to 13 amino acids that arise from cytosolic proteolysis via constitutive proteasome and IFNG-induced immunoproteasome (PubMed:23209413). Can bind different peptides containing allele-specific binding motifs, which are mainly defined by anchor residues at position 2 and 9 (PubMed:25808313, PubMed:29531227).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein

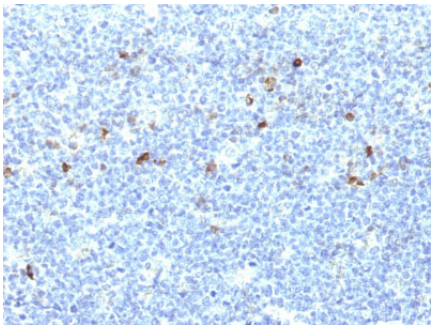
Background

This MAb reacts with cells bearing HLA-A25 or HLA-Aw32 antigens. In addition, a reaction was observed with a cell of phenotype A2, Aw31; B17, Bw49. HLA-A, with HLA-B and HLA-C, belongs to major histocompatibility complex (MHC) class I antigens and expresses constitutively on all nucleated cells. HLA system comprises closely linked genes controlling highly polymorphic proteins involved in the presentation of peptides to the T-cell receptor, inhibition of NK cell cytotoxicity, and rejection of tissue allotransplantation. Specific alleles at HLA loci are associated with diseases. This MAb is specifically applicable for typing peripheral T cells for the antigens HLA-A25 and HLA-Aw32.

References

Vilella R et al. Monoclonal antibody against HLA-Aw32 + A25. Is HLA-Aw32 an allele with no unique antigenic determinant? Hum Immunol 1983, 6(1):53-62

Images



Formalin-fixed, paraffin-embedded human Tonsil stained with MHC I Monoclonal Antibody (CATA-1).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.