

**HLA-A (MHC I) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone 108-2C5 ]**  
**Catalog # AH11402**

### Specification

#### HLA-A (MHC I) Antibody - With BSA and Azide - Product Information

|                   |  |
|-------------------|--|
| Application       | ,3,4,  |
| Primary Accession | <a href="#">P01889</a>   |
| Other Accession   | <a href="#">3105</a> , <a href="#">181244</a> ,<br><a href="#">654404</a> , <a href="#">77961</a> ,<br><a href="#">P30443</a> , <a href="#">P30499</a> |
| Reactivity        | Human  |
| Host              | Mouse  |
| Clonality         | Monoclonal   |
| Isotype           | Mouse / IgG1,<br>kappa   |
| Calculated MW     | ~41kDa KDa   |

#### HLA-A (MHC I) Antibody - With BSA and Azide - 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

##### Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

##### Precautions

HLA-A (MHC I) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

#### HLA-A (MHC I) Antibody - With BSA and Azide - Protein Information

Name HLA-B ([HGNC:4932](#))

Synonyms HLAB

##### Function

Antigen-presenting major histocompatibility complex class I (MHC I) molecule. In complex with B2M/beta 2 microglobulin displays primarily viral and tumor-derived

#### HLA-A (MHC I) Antibody - With BSA and Azide - Background

HLA-A, with HLA-B and HLA-C, belongs to major histocompatibility complex (MHC) class I antigens and expresses constitutively on all nucleated cells. MHC class I antigens play a role in class I MHC-associated antigen presentation, inhibition of NK cell cytotoxicity, tumor surveillance, and tissue allotransplantation. This MAb is useful for HLA molecular typing of peripheral blood leukocytes as well as a large number of leukemic cell lines. It reacts with an intralocus determinant present on a limited number of HLA-A locus-encoded gene products (HLA-A2, -A3, -A28, -A29, -A30, -A31 and  $\Delta$ Aw33). Its epitope maps between aa65-to-aa80 of the  $\alpha$ 1 domain of the HLA-A. This MAb recognizes an intralocus determinant present on a limited number of HLA-A locus-encoded gene products (HLA-A2, -A3, A28, -A29, -A30, -A31 and -Aw33). Furthermore, by testing its reactivity with HLA-A2 natural variants and mutants, the importance of amino acid residues 79 and/or 80 of the  $\alpha$ 1 domain was demonstrated in the formation of an intralocus HLA-A determinant.

#### HLA-A (MHC I) Antibody - With BSA and Azide - References

Domenech N et al. Hum Immunol 1991, 30(2):140-6 | Lozano F et al. Immunogenetics 1989, 30::50-3 | Lozano F et al. Tissue Antigens 1990, 35:193-5 | Young NT et al. Hum Immunol 1997, 52(1):1-11 | Krensky AM et al Transplant Proc 1996, 28(6):3026-8 | Hansen JA et al Hematol Oncol Clin North Am 1990, 4(3):507-515

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:<a href="http://www.uniprot.org/citations/25808313" target="\_blank">25808313</a>, PubMed:<a href="http://www.uniprot.org/citations/29531227" target="\_blank">29531227</a>, PubMed:<a href="http://www.uniprot.org/citations/9620674" target="\_blank">9620674</a>, PubMed:<a href="http://www.uniprot.org/citations/23209413" target="\_blank">23209413</a>). 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:<a href="http://www.uniprot.org/citations/7743181" target="\_blank">7743181</a>, PubMed:<a href="http://www.uniprot.org/citations/18991276" target="\_blank">18991276</a>). 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:<a href="http://www.uniprot.org/citations/29531227" target="\_blank">29531227</a>, PubMed:<a href="http://www.uniprot.org/citations/9620674" target="\_blank">9620674</a>, PubMed:<a href="http://www.uniprot.org/citations/24600035" target="\_blank">24600035</a>). Typically presents intracellular peptide antigens of 8 to 13 amino acids that arise from cytosolic proteolysis via constitutive proteasome and IFNG-induced immunoproteasome (PubMed:<a href="http://www.uniprot.org/citations/23209413" target="\_blank">23209413</a>). Can bind different peptides containing allele-specific binding motifs, which are mainly defined by anchor residues at position 2 and 9 (PubMed:<a href="http://www.uniprot.org/citations/25808313" target="\_blank">25808313</a>, PubMed:<a href="http://www.uniprot.org/citations/29531227" target="\_blank">29531227</a>).

**Cellular Location**

Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein

**HLA-A (MHC I) Antibody - With BSA and Azide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)