

# HLA-A Monoclonal Mouse Antibody (108-2C5)

## Product Description

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 -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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 1095, Anti-HLA-A (108-2C5)**

## Product attributes

Antibody number	#1095
Antibody reactivity (target)	HLA-A
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	108-2C5
Isotype	IgG1, kappa
Molecular weight	~41 kDa
Synonyms	HLA-A; HLA class 1A; MHC class I HLA-A
Human gene symbol	HLA-A
Entrez gene ID	3105
SwissProt	P01889; P30443; P30499
Unigene	181244; 654404; 77961
Immunogen	Normal human peripheral blood lymphocytes
Verified antibody applications	Flow (verified)
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Expected antibody applications	Flow, surface (published for clone), IHC (frozen) (published for clone), IF (published for clone), IP (published for clone)
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user
Positive control	THP-1 and Jurkat cells. Tonsil or lymph node.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Immunology, MHC antigens
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNC74	CF®740	742/767	633-685	775/50	<a href="#">CF®740 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. Tissue Antigens (2004) 64: 696-702. (IHC, frozen)
2. Clin Cancer Res (2005) 11: 498-504. (IHC, frozen)
3. Clin Exp Immunol (2006) 145: 365-371. (IF)
4. Mol Cell Proteom (2015) 14(7): 1770-1780. (Flow, surface; IP)

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Product link: <https://biotium.com/product/monoclonal-anti-mhc-i-108-2c5/>