

PRODUCT INFORMATION

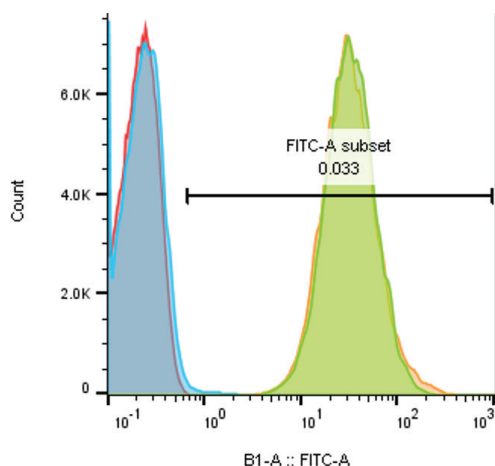
MHC Class I Monoclonal Antibody (Clone W6/32)

Item No. 20898

Overview and Properties

Contents:	This vial contains 100 µg of protein G-purified IgG
Synonyms:	HLA-A, HLA-B, HLA-C, Major Histocompatibility Complex Class I
Immunogen:	Cell membranes of human tonsil lymphocytes
Species Reactivity:	(+) Human, baboon, bovine, monkey MHC Class I
Uniprot No.:	HLA-A: P30443; HLA-B: P30460; HLA-C: P10321
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, 50% glycerol with 0.1% BSA and 0.02% sodium azide
Clone:	W6/32
Host:	Mouse
Isotype:	IgG2
Applications:	Flow cytometry (FC) and Immunoprecipitation (IP); recommended starting dilution for FC is 1:1,000 and 2-5 µg IgG per IP test. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



	Sample Name	Subset Name	Count
W6/32 (1µg/ml)	2017-05-05.1 -.A1.0002.mqd	Ungated	10503
W6/32 (10µg/ml)	2017-05-05.10 -.A1.0001.mqd	Ungated	10701
Secondary Only	2017-05-05.Secondary -.A1.0001.mqd	Live	9592
Unlabeled Cells (-)	2017-05-05.PBS -.A1.0001.mqd	Live	286126

Jurkat cells were blocked with FBS and probed with the W6/32 antibody. The secondary antibody for all tests was a Goat Anti-Mouse (IgG-IgM) FITC (Item No. 10006617) used at 1:200.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Major histocompatibility complex (MHC) molecules, also designated human leukocyte antigen (HLA) molecules, are cell-surface receptors that bind foreign peptides and present them to T lymphocytes.¹ MHC class I molecules consist of two polypeptide chains, an α or heavy chain, and β 2-microglobulin, a non-covalently associated protein.² Cytotoxic T lymphocytes bind antigenic peptides presented by MHC class I molecules.³ Antigens that bind to MHC class I molecules are typically 8-10 residues in length and are stabilized in a peptide binding groove.⁴ HLA-class I MHC antigens are intrinsic membrane glycoproteins expressed on nucleated cells and non-covalently associated with an invariant β 2-microglobulin. They carry foreign determinants important for immune recognition by cytotoxic T cells, and are thus important for antiviral and antitumor defense.³ Human HLA-class I antigens are represented by HLA-A, HLA-B, and HLA-C molecules.

References

1. Barnstable, C.J., Bodmer, W.F., Brown, G., *et al.* Production of monoclonal antibodies to group A erythrocytes, HLA and other human cell surface antigens-new tools for genetic analysis. *Cell* **14**(1), 9-20 (1978).
2. Janeway, C., Travers, P., Walport, M., *et al.* Antigen recognition by B-cell and T-cell receptors. *Immunobiology* **6**, 103-107 (2004).
3. Svitek, N., Hansen, A.M., Steinaa, L., *et al.* Use of "one-pot, mix-and-read" peptide-MHC class I tetramers and predictive algorithms to improve detection of cytotoxic T lymphocyte responses in cattle. *Vet. Res.* **45**(50), (2014).
4. Brodsky, F.M., and Parham, P. Monomorphic anti-HLA-A,B,C monoclonal antibodies detecting molecular subunits and combinatorial determinants. *J. Immunol.* **128**(1), 129-135 (1982).

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