SANTA CRUZ BIOTECHNOLOGY, INC.

HLA-A/B/C (ICO-53): sc-52422

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Major histocompatibility complex (MHC) molecules form an integral part of the immune response system. They are cell surface receptors that bind peptides and present them to T lymphocytes. Human leukocyte antigens (HLAs) are polymorphic members of the MHC family that are specifically involved in the presentation of antigens to the T cell receptor. There are two classes of HLA antigens: class I (HLA-A, HLA-B and HLA-C) and class II (HLA-D). Class I molecules are expressed in nearly all cells and play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum. The differential structural properties of MHC class I and class II molecules account for their respective roles in activating different populations of T lymphocytes. HLA-A, -B and -C encode membrane -anchored heavy chains, which heterodimerize with a light chain (β-2-Microglobulin) to form MHC-I. Polymorphisms yield hundreds of HLA-A, -B and -C alleles.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HLA-A (human) mapping to 6p22.1, HLA-B/HLA-C (human) mapping to 6p21.33.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

SOURCE

HLA-A/B/C (ICO-53) is a mouse monoclonal antibody raised against human HLA.

PRODUCT

Each vial contains 200 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

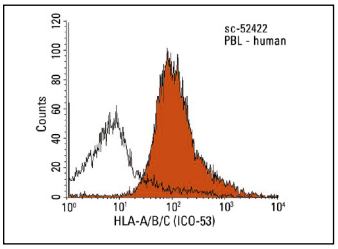
HLA-A/B/C (ICO-53) is available conjugated fluorescein (sc-52422 FITC, 100 tests in 2 ml), for IF, IHC(P) and FCM.

APPLICATIONS

HLA-A/B/C (ICO-53) is recommended for detection of HLA-A, HLA-B and HLA-C antigens of human origin by flow cytometry (1 µg per 1 x 10^6 cells).

Molecular Weight of HLA-A/B/C: 46 kDa.

DATA



HLA-A/B/C (ICO-53): sc-52422. Indirect FCM analysis of human peripheral blood leukocytes stained with HLA-A/B/C (ICO-53), followed by PE-conjugated goat anti-mouse IgG_{2a}: sc-3765. Black line histogram represents the isotype control, normal mouse IgG_{2a}: sc-3878.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CONJUGATES

See **MHC class I (W6/32): sc-32235** for MHC class I antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.