SANTA CRUZ BIOTECHNOLOGY, INC.

H2-D^b (5K45): sc-71199

BACKGROUND

The H2 gene complex encodes for MHC class I molecules that are histocompatibility antigens consisting of heterodimers of highly polymorphic α chains non-covalently associated with the invariant β-2-Microglobulin cell types. MHC class I molecules present endogenously synthesized peptides to CD8$^+$ T lymphocytes, which are usually cytotoxic T cells. These antigens are expressed on most nucleated cells and levels of expression vary depending on cell type. The expression of MHC class I antigens on thymic epithelial cells regulates the positive and negative selection of CD8$^+$ T cells during T cell ontogeny. H2-D^b is an MHC class I molecule that may inhibit or activate natural killer (NK) cells.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: H2-L (mouse) mapping to 17 B1.

SOURCE

H2-D^b (5K45) is a mouse monoclonal antibody raised against C3H.SW splenocytes of mouse origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

H2-D^b (5K45) is available conjugated either phycoerythrin (sc-71199 PE, 100 tests in 2 ml) or fluorescein (sc-71199 FITC, 100 tests in 2 ml), for IF, IHC(P) and FCM.

APPLICATIONS

H2-D^b (5K45) is recommended for detection of α3 domain of H2-D^b class I MHC antigen of mouse origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells); may cross-react with the α3 domain of H2-Ld and with H2-D^q and H2-L^q; non cross-reactive with H2-K^d or H2-D^d.

Molecular Weight of H2-D^b: 24 kDa.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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