SANTA CRUZ BIOTECHNOLOGY, INC.

H2-D^k (15-5-5): sc-52543

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Major histocompatibility complex (MHC) molecules, which include human leukocyte antigens (HLAs), form an integral part of the immune response system. They are cell-surface receptors that bind foreign peptides and present them to cytotoxic T lymphocytes (CTLs). MHC class I molecules consist of two polypeptide chains, an a or heavy chain and a non-covalently associated protein, β-2-Microglobulin. MHC class II molecules consist of a non-covalent complex of an α and β chain. The differential structural properties of MHC class I and class II molecules account for their respective roles in activating different populations of T lymphocytes. H2-D^k is an MHC class I molecule that presents peptides derived from the endoplasmic reticulum lumen.

REFERENCES

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CHROMOSOMAL LOCATION

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

SOURCE

H2-D^k (15-5-5) is a mouse monoclonal antibody raised against C3H 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^k (15-5-5) is available conjugated fluorescein (sc-52543 FITC, 200 µg/ml), for IF, IHC(P) and FCM.

APPLICATIONS

H2-D^k (15-5-5) is recommended for detection of H2-D^k class I alloantigen of mouse origin by flow cytometry (1 µg per 1 x 10^6 cells); also recommended for detection of H2-K^d and with cells from mice with the H2f haplotype; non cross-reactive with other haplotypes (e.g. a, b, p, q, r or s).

Molecular Weight of H2-D^k: 41 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.