



H2-D^d (5K47): sc-71200

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 α 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^d is a MHC class I molecule involved in the presentation of foreign antigens to the immune system. Both murine Ly-49D and Ly-49A are receptors for H2-D^d.

REFERENCES

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CHROMOSOMAL LOCATION

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

SOURCE

H2-D^d (5K47) is a mouse monoclonal antibody raised against C57BL/6 x DBA/2 F1 hybrid splenocytes of mouse origin.

RESEARCH USE

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

PRODUCT

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

H2-D^d (5K47) is available conjugated fluorescein (sc-71200 FITC, 100 tests in 2 ml), for IF, IHC(P) and FCM.

APPLICATIONS

H2-D^d (5K47) is recommended for detection of a conformational epitope on H2-D^d MHC class I found on the N terminal domains of α 1 and α 2 chains when complexed with β -2-Microglobulin of mouse origin by immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1 x 10⁶ cells); non cross-reactive with H2D^d α chains synthesized *in vitro*.

Suitable for use as control antibody for H2-D^d siRNA (m): sc-72171, H2-D^d shRNA Plasmid (m): sc-72171-SH and H2-D^d shRNA (m) Lentiviral Particles: sc-72171-V.

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

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.