# H2-Dd (34-5-8S): sc-52542



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  $\alpha$  or heavy chain and a non-covalently associated protein,  $\beta$ -2-Microglobulin. MHC class II molecules consist of a non-covalent complex of an  $\alpha$  and  $\beta$  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-Dd 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-Dd.

# **REFERENCES**

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## **CHROMOSOMAL LOCATION**

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

## **SOURCE**

H2-D<sup>d</sup> (34-5-8S) 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  $\mu g$   $lgG_{2a}$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

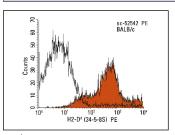
## **APPLICATIONS**

H2-D<sup>d</sup> (34-5-8S) is recommended for detection of a conformational epitope on H2-D<sup>d</sup> MHC class I found on the N terminal domains of  $\alpha 1$  and  $\alpha 2$  chains when complexed with  $\beta$ -2-Microglobulin of mouse origin by immunoprecipitation [1-2  $\mu g$  per 100-500  $\mu g$  of total protein (1 ml of cell lysate)] and flow cytometry (1  $\mu g$  per 1 x 10<sup>6</sup> cells); non cross-reactive with H2D<sup>d</sup>  $\alpha$  chains synthesized in vitro.

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

Molecular Weight of H2-Dd: 24 kDa.

## **DATA**



 $\rm H2\text{-}D^d$  (34-5-8S): sc-52542. Indirect FCM analysis of BALB/c splenocytes stained with H2-D $^d$  (34-5-8S), followed by PE-conjugated goat anti-mouse IgG: sc-3738. 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.

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