# SANTA CRUZ BIOTECHNOLOGY, INC.

# H2-I/Adβ (34-5-3): sc-52538



# BACKGROUND

Major histocompatibility complex (MHC) molecules 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,  $\beta 2$  microglobulin. MHC class II molecules consist of a non-covalent complex of an a and b 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-I/Ad $\beta$  is a MCH class II beta chain precursor.

### REFERENCES

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- Muhlethaler-Mottet, A., Otten, L.A., Steimle, V. and Mach, B. 1997. Expression of MHC class II molecules in different cellular and functional compartments is controlled by differential usage of multiple promoters of the transactivator CIITA. EMBO J. 16: 2851-2860.
- Villadangos, J.A. 2001. Presentation of antigens by MHC class II molecules: getting the most out of them. Mol. Immunol. 38: 329-346.
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# CHROMOSOMAL LOCATION

Genetic locus: HLA-DQB2 (human) mapping to 6p21; H2-Ab1 (mouse) mapping to 17 B1.

#### SOURCE

H2-I/Ad $\beta$  (34-5-3) is a mouse monoclonal antibody raised against (C57BL/6 x DBA/2)F1 splenocytes of mouse origin.

# PRODUCT

Each vial contains 100  $\mu g~lg G_{2a}$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **RESEARCH USE**

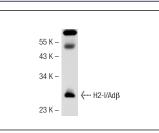
For research use only, not for use in diagnostic procedures.

## APPLICATIONS

H2-I/Ad $\beta$  (34-5-3) is recommended for detection of H2-I/Ad $\beta$  of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and flow cytometry (1 µg per 1 x 10^6 cells); may cross-react with H2-I/Ab.

Molecular Weight of H2-I/Ad<sub>B</sub>: 30 kDa.

#### DATA



H2-I/Ad $\beta$  (34-5-3): sc-52538. Western blot analysis of H2-I/Ad $\beta$  expression in mouse PBL whole cell lysate.

#### **STORAGE**

Store at 4° C, \*\*D0 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.