



## H2-I/Ab (DaB2): sc-65383

### 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  $\alpha$  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 and are involved in antigen presentation by antigen presenting cells (APCs) to CD4<sup>+</sup> T cells. They are expressed on APCs including B cells, macrophages, monocytes and dendritic cells, and are inducible by interferon- $\gamma$  on a number of other cells, such as endothelium and epithelial cells. The mouse H2-Ab locus is orthologous to human DQB, which varies from typical class II genes in that both the  $\alpha$  and  $\beta$  chains are polymorphic. The differential structural properties of MHC class I and class II molecules account for their respective roles in activating different populations of T lymphocytes.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: H2-Ab1 (mouse) mapping to 17 B1.

### RESEARCH USE

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

### SOURCE

H2-I/Ab (DaB2) is a mouse monoclonal antibody raised against C57B1 splenocytes of mouse origin.

### PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

H2-I/Ab (DaB2) is recommended for detection of MHC class II I-Ab haplotype of mouse origin by immunofluorescence and immunohistochemistry on frozen sections (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1  $\mu$ g per  $1 \times 10^6$  cells).

Molecular Weight of H2-I/Ab: 30 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](http://www.scbt.com) for detailed protocols and support products.