

H2-I/Ab β (5K40): sc-71201

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 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 and are involved in antigen presentation by antigen presenting cells (APCs) to CD4⁺ T cells. They are expressed on APCs including B cells, macrophages, monocytes and dendritic cells, and are inducible by interferon- γ 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 α and β 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 β (5K40) is a mouse monoclonal antibody raised against C3H.SW splenocytes of mouse origin.

PRODUCT

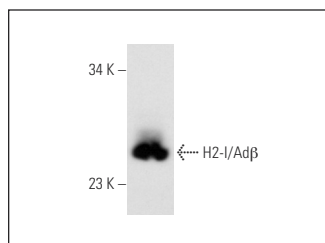
Each vial contains 100 μ g IgM in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

H2-I/Ab β (5K40) is recommended for detection of MHC class II H2-I/Ab β of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Molecular Weight of H2-I/Ab β : 30 kDa.

DATA



H2-I/Ab β (5K40): sc-71201. Western blot analysis of H2-I/Ab β expression in mouse PBL whole cell lysate.

SELECT PRODUCT CITATIONS

- Velazquez, R., Ferreira, E., Winslow, W., Dave, N., Piras, I.S., Naymik, M., Huentelman, M.J., Tran, A., Caccamo, A. and Oddo, S. 2019. Maternal choline supplementation ameliorates Alzheimer's disease pathology by reducing brain homocysteine levels across multiple generations. *Mol. Psychiatry*. E-published.

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.