SANTA CRUZ BIOTECHNOLOGY, INC.

H2-K^k (B1B8.C2-Ky99): sc-59201

SANTA CRUZ BIOTECHNOLOGY

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 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-K^k is a murine MHC class I protein that is expressed highly on L929 fibroblasts.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HLA-C (human) mapping to 6p21.3; H2-K1 (mouse) mapping to 17 B1.

SOURCE

H2-K^k (B1B8.C2-Ky99) is a mouse monoclonal antibody raised against MHC class I H2-K^k of mouse origin.

PRODUCT

Each vial contains 100 µg IgG_3 in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 1% BSA.

APPLICATIONS

H2-K^k (B1B8.C2-Ky99) is recommended for detection of MHC class I H2-K^k 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).

Molecular Weight of H2-K^k: 41 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.