**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-K\(^k\) is a mouse MHC class I protein that is highly expressed on L929 fibroblasts.

**REFERENCES**


**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

H2-K\(^k\) (36-7-5) is available conjugated either phycoerythrin (sc-52551 PE, 100 tests in 2 ml) or fluorescein (sc-52551 FITC, 100 tests in 2 ml), for IF, IHQ(I) and FCM.

**APPLICATIONS**

H2-K\(^k\) (36-7-5) is recommended for detection of H2-K\(^k\) MHC class I alloantigen of mouse origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10\(^6\) cells); non-cross-reactive with other (e.g. b, d, q) haplotypes; may cross-react with splenocytes of SJL/Hsd mice.

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

**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 for detailed protocols and support products.