CD8-β (5F2): sc-19994

BACKGROUND

The T cell receptor (TCR) is a heterodimer composed of either α and β or γ and δ chains. CD3 chains and the CD4 or CD8 co-receptors are also required for efficient signal transduction through the TCR. The TCR is expressed on T helper and T cytotoxic cells that can be distinguished by their expression of CD4 and CD8. T helper cells express CD4 proteins and T cytotoxic cells display CD8. CD8 (also designated Leu 2 or T8), a cell surface glycoprotein, is a two chain complex (αα or αβ) receptor that binds class I MHC molecules presented by the antigen-presenting cell (APC). A primary function of CD8 is to facilitate antigen recognition by the TCR and to strengthen the avidity of the TCR-antigen interactions. An additional role for CD8-expressing T cells may be to maintain low levels of HIV expression.

CHROMOSOMAL LOCATION

Genetic locus: CD8B (human) mapping to 2p11.2.

SOURCE

CD8-β (5F2) is a mouse monoclonal antibody raised against the β chain of CD8 of rat origin.

PRODUCT

Each vial contains 200 µg IgG κappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD8-β (5F2) is available conjugated to either phycoerythrin (sc-19994 PE) or fluorescein (sc-19994 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

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.

APPLICATIONS

CD8-β (5F2) is recommended for detection of CD8-β chain of human 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁸ cells).

Suitable for use as control antibody for CD8-β siRNA (h): sc-35029, CD8-β shRNA Plasmid (h): sc-35029-SH and CD8-β shRNA (h) Lentiviral Particles: sc-35029-V.

Molecular Weight of CD8-β: 32 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208, CCRF-CEM cell lysate: sc-2225 or SUP-T1 whole cell lysate: sc-384796.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:


DATA

CD8-β (5F2) sc-19994. Western blot analysis of CD8-β expression in SUP-T1 whole cell lysate.

CD8-β (5F2) sc-19994. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human peripheral blood showing cytoplasmic staining.

SELECT PRODUCT CITATIONS


RESEARCH USE

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