CD8-α (53-6.7): sc-18913

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 (CD8-α and CD8-β) 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 proteins; T helper cells express CD4 proteins and T cytotoxic cells display CD8 proteins. CD8s are cell surface glycoproteins that exist as two chain complex (αβ or γδ) receptors that bind class I MHC molecules presented by the antigen-presenting cell (APC). A primary function of CD8 proteins 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: Cdb8 (mouse) mapping to 6 C1.

SOURCE
CD8-α (53-6.7) is a rat monoclonal antibody raised against spleen cells of mouse origin.

PRODUCT
Each vial contains 200 µg IgG₂a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for in vitro and in vivo depletion, inhibition of T-cell responses to IL-2, and blocking of cytotoxicity, sc-18913 L, 200 µg/0.1 ml.

CD8-α (53-6.7) is available conjugated to either phycoerythrin (sc-18913 PE), fluorescein (sc-18913 FITC), Alexa Fluor® 488 (sc-18913 AF488), Alexa Fluor® 546 (sc-18913 AF546), Alexa Fluor® 594 (sc-18913 AF594) or Alexa Fluor® 647 (sc-18913 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-18913 AF680) or Alexa Fluor® 790 (sc-18913 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, CD8-α (53-6.7) is available conjugated to either APC (sc-18913 APC) or APC-Cy7 (sc-18913 APC7), 100 tests in 2 ml, for IF, IHC(P) and FCM.

APPLICATIONS
CD8-α (53-6.7) is recommended for detection of CD8-α chain of mouse origin by 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 10⁶ cells).

Suitable for use as control antibody for CD8-α siRNA (m): sc-43677, CD8-α shRNA Plasmid (m): sc-43677-SH and CD8-α shRNA (m) Lentiviral Particles: sc-43677-V.

Molecular Weight of CD8-α: 39 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.

DATA

SELECT PRODUCT CITATIONS


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

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