CD8-α (D-9): sc-7970

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 (αα or αβ) 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: CD8A (human) mapping to 2p11.2; CD8α (mouse) mapping to 6 C1.

SOURCE
CD8-α (D-9) is a mouse monoclonal antibody raised against amino acids 22-182 representing the extracellular domain of CD8-α chain of human origin.

PRODUCT
Each vial contains 200 μg IgG2k kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD8-α (D-9) is available conjugated to agarose (sc-7970 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-7970 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-7970 PE), fluorescein (sc-7970 FITC), Alexa Fluor® 488 (sc-7970 AF488), Alexa Fluor® 546 (sc-7970 AF546), Alexa Fluor® 594 (sc-7970 AF594) or Alexa Fluor® 647 (sc-7970 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-7970 AF680) or Alexa Fluor® 790 (sc-7970 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS
CD8-α (D-9) is recommended for detection of CD8-α chain of mouse, rat and 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD8-α siRNA (h): sc-29247, CD8-α siRNA (m): sc-43677, CD8-α shRNA Lentiviral Particles (h): sc-29247-SH, CD8-α shRNA Lentiviral Particles (m): sc-43677-SH, CD8-α shRNA (h) Lentiviral Particles: sc-29247-V and CD8-α shRNA (m) Lentiviral Particles: sc-43677-V.

Molecular Weight of CD8-α: 39 kDa.

Positive Controls: Hela whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or Jurkat whole cell lysate: sc-2204.

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

DATA

SELECT PRODUCT CITATIONS


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