

TCR γ/δ (UC7-13D5): sc-19608

BACKGROUND

The T cell antigen receptor (TCR) recognizes foreign antigens and translates such recognition events into intracellular signals that elicit a change in the cell from a dormant to an activated state. TCR is a heterodimer composed of either α and β or γ and δ chains. The vast majority of circulating T cells (95%) express the α/β heterodimer while roughly 2-5% express the γ/δ heterodimer. CD3 chains and the CD4 or CD8 coreceptors 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. CD4 is also expressed on cortical cells, mature medullary thymocytes, microglial cells and dendritic cells. CD4, also designated T4 and Leu 3, is a membrane glycoprotein that contains four extracellular immunoglobulin-like domains. The TCR, in association with CD4, can bind class II MHC molecules presented by the antigen-presenting cells. The CD4 protein functions by increasing the avidity of the interaction between the TCR and an antigen-class II MHC complex.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Tcrg (mouse) mapping to 13 A2, Tcrd (mouse) mapping to 14 C2.

SOURCE

TCR γ/δ (UC7-13D5) is a Armenian hamster monoclonal antibody raised against TCR γ/δ of mouse origin.

STORAGE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TCR γ/δ (UC7-13D5) is available conjugated to agarose (sc-19608 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-19608 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-19608 PE), fluorescein (sc-19608 FITC), Alexa Fluor® 488 (sc-19608 AF488), Alexa Fluor® 546 (sc-19608 AF546), Alexa Fluor® 594 (sc-19608 AF594) or Alexa Fluor® 647 (sc-19608 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-19608 AF680) or Alexa Fluor® 790 (sc-19608 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

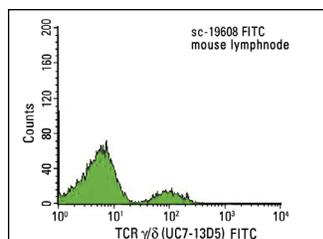
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APPLICATIONS

TCR γ/δ (UC7-13D5) is recommended for detection of TCR γ and TCR δ of mouse origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1 x 10⁶ cells).

Molecular Weight of TCR γ/δ : 45-60 kDa.

DATA



TCR γ/δ (UC7-13D5): sc-19608. FCM analysis of mouse lymphnode. Kindly provided by Jeffrey A. Bluestone at UCSF Diabetes Center.

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.