SANTA CRUZ BIOTECHNOLOGY, INC.

TCR V α 8 (KT50): sc-53477

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. Recognizing such a variety of antigens requires diverse specificities in the TCR repertoire. This is obtained by the somatic recombination of variable (V), diversity (D) and joining (J) gene segments in the assembly of each TCR chain. The TCR β and γ chain genes lie in distinct loci, while the genes encoding the TCR α and δ chains comprise a single locus. The assembled TCR α chain includes only V and J segments. In mice, 104 V α segments and 61 J α segments are found at the α/δ loci. The human α/δ loci has about half as many V α segments and approximately the same number of J α segments.

REFERENCES

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SOURCE

TCR V α 8 (KT50) is a rat monoclonal antibody raised against V α 8 T cell receptor of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TCR V α 8 (KT50) is available conjugated to agarose (sc-53477 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-53477 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53477 PE), fluorescein (sc-53477 FITC), Alexa Fluor® 488 (sc-53477 AF488), Alexa Fluor® 546 (sc-53477 AF546), Alexa Fluor® 594 (sc-53477 AF594) or Alexa Fluor® 647 (sc-53477 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53477 AF680) or Alexa Fluor® 790 (sc-53477 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

TCR V α 8 (KT50) is recommended for detection of TCR V α 8 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).

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.