

CD8 (5F10): sc-70794

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 ($\alpha\alpha$ or $\alpha\beta$) 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.

REFERENCES

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9. Hogg, N., Stewart, M.P., Scarth, S.L., Newton, R., Shaw, J.M., Law, S.K. and Klein, N. 1999. A novel leukocyte adhesion deficiency caused by expressed but nonfunctional β 2 Integrins Mac-1 and LFA-1. *J. Clin. Invest.* 103: 97-106.

CHROMOSOMAL LOCATION

Genetic locus: CD8A/CD8B (human) mapping to 2p11.2.

SOURCE

CD8 (5F10) is a mouse monoclonal antibody raised against CD8 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD8 (5F10) is available conjugated either phycoerythrin (sc-70794 PE, 100 tests in 2 ml) or fluorescein (sc-70794 FITC, 100 tests in 2 ml), for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

CD8 (5F10) is recommended for detection of CD8 of human origin by 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 μ g per 1×10^6 cells).

Molecular Weight of CD8 β : 32 kDa.

Molecular Weight of CD8 α : 39 kDa.

SELECT PRODUCT CITATIONS

1. Sugino, K., Akira, H., Toshimasa, U., Kazuhito H., Hiroshi A. and Sakae H. 2013. Bronchiolitis obliterans associated with Stevens-Johnson syndrome: histopathological bronchial reconstruction of the whole lung and immunohistochemical study. *Diagn. Pathol.* 8: 134.
2. Bekircan-Kurt, C.E., Tan, E. and Erdem-Özdamar, S. 2015. The activation of RAGE and NF κ B in nerve biopsies of patients with axonal and vasculitic neuropathy. *Noro. Psikiyat. Ars.* 52: 279-282.
3. Trikamji, B. and Pestronk, A. 2020. Treatable, motor-sensory, axonal neuropathies with C_{5b-9} complement on endoneurial microvessels. *Muscle Nerve*. E-published.

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.