

CD45 (M1/9.3.4.HL2): sc-23925

BACKGROUND

CD45 has been identified as a transmembrane glycoprotein, broadly expressed among hematopoietic cells. Eight isoforms of CD45 are distributed throughout the immune system according to cell type. The variation in these isoforms is localized to the extracellular domain of CD45, while the intracellular domain is conserved. CD45 functions as a phospho-tyrosine phosphatase, a vital component for efficient tyrosine phosphorylation induction by the TCR/CD3 complex. The tyrosine phosphatase activity of CD45 is contained within the conserved intracellular domain. Src and Syk family protein tyrosine kinases are utilized by the TCR/CD3 complex to initiate signaling cascades. Several members of these two families, including Lck, Fyn and Zap70, have been implicated as physiological substrates of CD45.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ptprc (mouse) mapping to 1 E4.

SOURCE

CD45 (M1/9.3.4.HL2) is a rat monoclonal antibody raised against C57BL/10 mouse spleen T lymphocytes.

RESEARCH USE

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

PRODUCT

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

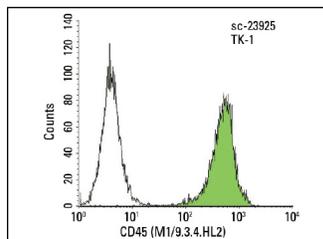
APPLICATIONS

CD45 (M1/9.3.4.HL2) is recommended for detection of CD45 of mouse origin by indirect flow cytometry (1 µg per 1 x 10⁶ cells).

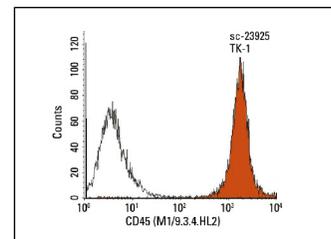
Suitable for use as control antibody for CD45 siRNA (m): sc-35001, CD45 shRNA Plasmid (m): sc-35001-SH and CD45 shRNA (m) Lentiviral Particles: sc-35001-V.

Molecular Weight of CD45: 180-220 kDa.

DATA



CD45 (M1/9.3.4.HL2): sc-23925. Indirect FCM analysis of live TK-1 cells stained with CD45 (M1/9.3.4.HL2), followed by FITC-conjugated goat anti-rat IgG: sc-2011.



CD45 (M1/9.3.4.HL2): sc-23925. Indirect FCM analysis of TK-1 cells stained with CD45 (M1/9.3.4.HL2), followed by PE-conjugated goat anti-rat IgG: sc-3740. Black line histogram represents the isotype control, normal rat IgG_{2a}: sc-3883.

STORAGE

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

PROTOCOLS

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