

# CD10 (2A1H5E1): sc-65990



The Power to Question

## BACKGROUND

CD10, also called the common acute lymphoblastic leukemia antigen (CALLA) and neutral endopeptidase (NEP), is a type II integral membrane glycoprotein. CD10 acts as a zinc metalloprotease that cleaves a variety of biologically active peptides including Angiotensins I and II. It is expressed on early B and T lymphoid precursors, B blasts, some granulocytes, bone marrow stromal cells and certain epithelial cells including some tumor cell lines. CD10 is used as a marker of common acute lymphocytic leukemias and some lymphomas.

## REFERENCES

- Horejsi, V., et al. 1988. Monoclonal antibodies against human leucocyte antigens. II. Antibodies against CD45 (T200), CD3 (T3), CD43, CD10 (CALLA), transferrin receptor (T9), a novel broadly expressed 18 kDa antigen (MEM-43) and a novel antigen of restricted expression (MEM-74). *Folia Biol.* 34: 23-34.
- Shipp, M.A. and Look, A.T. 1993. Hematopoietic differentiation antigens that are membrane-associated enzymes: cutting is the key! *Blood* 82: 1052-1070.
- Schlossman, S.L., et al. 1995. *Leukocyte Typing V: White Cell Differentiation Antigens*. Oxford: Oxford University Press.
- Lu, B., et al. 1995. Neutral endopeptidase modulation of septic shock. *J. Exp. Med.* 181: 2271-2275.

## CHROMOSOMAL LOCATION

Genetic locus: MME (human) mapping to 3q25.2; Cd109 (mouse) mapping to 9 E1.

## SOURCE

CD10 (2A1H5E1) is a mouse monoclonal antibody raised against purified recombinant CD10 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

CD10 (2A1H5E1) is recommended for detection of CD10 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for CD10 siRNA (h): sc-29959, CD109 siRNA (m): sc-44951, CD10 shRNA Plasmid (h): sc-29959-SH, CD109 shRNA Plasmid (m): sc-44951-SH, CD10 shRNA (h) Lentiviral Particles: sc-29959-V and CD109 shRNA (m) Lentiviral Particles: sc-44951-V.

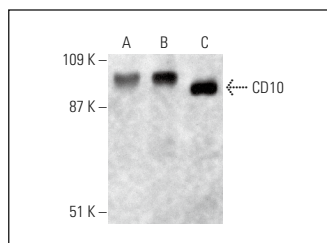
Molecular Weight of CD10: 100 kDa.

Positive Controls: Ramos cell lysate: sc-2216, mouse kidney extract: sc-2255 or GA-10 whole cell lysate: sc-364230.

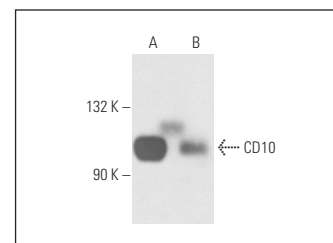
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



CD10 (2A1H5E1): sc-65990. Western blot analysis of CD10 expression in C3H/10T1/2 whole cell lysate (A) and mouse kidney (B) and rat kidney (C) tissue extracts.



CD10 (2A1H5E1): sc-65990. Western blot analysis of CD10 expression in Ramos (A) and GA-10 (B) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Xu, Y., et al. 2015. Loss of IRF8 inhibits the growth of diffuse large B-cell lymphoma. *J. Cancer* 6: 953-961.

## 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](http://www.scbt.com) for detailed protocols and support products.



See **CD10 (F-4): sc-46656** for CD10 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.