## 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

1. 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.
2. Shipp, M.A. and Look, A.T. 1993. Hematopoietic differentiation antigens that are membrane-associated enzymes: cutting is the key! Blood 82: 1052-1070.

## CHROMOSOMAL LOCATION

Genetic locus: MME (human) mapping to 3q25.2; Mme (mouse) mapping to 3 E 1 .

## SOURCE

CD10 (E-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CD10 of human origin.

## PRODUCT

Each vial contains $100 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, ready P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## APPLICATIONS

$\mathrm{CD10}(\mathrm{E}-14)$ is recommended for detection of CD10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:1001:1000), immunofluorescence (starting dilution 1:50, dilution range 1:501:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other CD family members.
CD10 (E-14) is also recommended for detection of CD10 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for CD10 siRNA (h): sc-29959, CD10 siRNA (m): sc-37230, CD10 shRNA Plasmid (h): sc-29959-SH, CD10 shRNA Plasmid (m): sc-37230-SH, CD10 shRNA (h) Lentiviral Particles: sc-29959-V and CD10 shRNA (m) Lentiviral Particles: sc-37230-V.
Molecular Weight of CD10: 100 kDa .
Positive Controls: Raji whole cell lysate: sc-364236.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz MarkerTM compatible goat antirabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:1001:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



CD10 (E-14): sc-102424. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing membrane and cytoplasmic staining of cells in white pulp and cells in red pulp.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **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 or our catalog for detailed protocols and support products.

Try CD10 (F-4): sc-46656 or CD10 (2A1H5E1):
sc-65990, our highly recommended monoclonal alternatives to CD10 (E-14). Also, for AC, HRP, FITC, PE, Alexa Fluor ${ }^{\circledR} 488$ and Alexa Fluor ${ }^{\circledR} 647$ conjugates, see
CD10 (F-4): sc-46656

