

# CD52 (N-12): sc-27554

## BACKGROUND

CD52 is a glycosylphosphatidylinositol (GPI)-linked surface antigen present at high levels on epithelial cells lining the male reproductive tract, thymocytes, lymphocytes, monocytes and macrophages. It is also present at variable levels on lymphoid malignancies. During sperm maturation, spermatozoa passing through the genital tract acquire CD52 that is shed from the epithelial cell lining into seminal plasma. CD52 is detectable on the surface of epididymal sperm and in the ejaculate but not on spermatogenic cells or testicular spermatozoa. The peptide backbone of CD52, which consists of 12 amino acids, is considered a mere scaffold for posttranslational modifications, such as GPI-anchor and N-glycosylation.

## REFERENCES

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2. Domagala, A., et al. 2001. CD52 antigen—a review. *Med. Sci. Monit.* 7: 325-331.
3. Xue, J., et al. 2003. First total synthesis of a GPI-anchored peptide. *J. Org. Chem.* 68: 4020-4029.
4. Shao, N., et al. 2003. Chemical synthesis of CD52 glycopeptides containing the acid-labile fucosyl linkage. *J. Org. Chem.* 68: 9003-9011.
5. Kumar, S., et al. 2003. Expression of CD52 on plasma cells in plasma cell proliferative disorders. *Blood* 102: 1075-1077.
6. Hasegawa, A., et al. 2004. Possible presence of O-linked carbohydrate in the human male reproductive tract CD52. *J. Reprod. Immunol.* 62: 91-100.
7. Hasegawa, A., et al. 2005. Antigenic epitope for sperm-immobilizing antibody detected in infertile women. *J. Reprod. Immunol.* 67: 77-86.
8. Ermini, L., et al. 2005. Different glycoforms of the human GPI-anchored antigen CD52 associate differently with lipid microdomains in leukocytes and sperm membranes. *Biochem Biophys Res Commun.* 338: 1275-1283.

## CHROMOSOMAL LOCATION

Genetic locus: CD52 (human) mapping to 1p36.11.

## SOURCE

CD52 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CD52 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-27554 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

CD52 (N-12) is recommended for detection of precursor and mature CD52 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD52 siRNA (h): sc-44666, CD52 shRNA Plasmid (h): sc-44666-SH and CD52 shRNA (h) Lentiviral Particles: sc-44666-V.

Molecular Weight of CD52: 20-28 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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) or our catalog for detailed protocols and support products.


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Try **CD52 (H1186): sc-51560**, our highly recommended monoclonal alternative to CD52 (N-12).