SANTA CRUZ BIOTECHNOLOGY, INC.

CD52 (FL-61): sc-25838



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 spermatogenetic 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

- Yeung, C.H., Cooper, T.G. and Nieschlag, E. 1997. Human epididymal secreted protein CD52 on ejaculated spermatozoa: correlations with semen characteristics and the effect of its antibody. Mol. Hum. Reprod. 3: 1045-1051.
- 2. Domagala, A. and Kurpisz, M. 2001. CD52 antigen a review. Med. Sci. Monit. 7: 325-331.
- Shao, N., Xue, J., Guo, Z. 2003. Chemical synthesis of CD52 glycopeptides containing the acid-labile fucosyl linkage. J. Org. Chem. 68: 9003-9011.
- 4. Kumar S, Kimlinger, T.K., Lust, J.A., Donovan, K. and Witzig, T.E. 2003. Expression of CD52 on plasma cells in plasma cell proliferative disorders. Blood 102: 1075-1077.
- Hasegawa, A., Sawai, H., Tsubamoto, H., Hori, M., Isojima, S. and Koyama, K. 2004. Possible presence of O-linked carbohydrate in the human male reproductive tract CD52. J Reprod Immunol. 62: 91-100.
- 6. LocusLink Report (LocusID: 1043). http://www.ncbi.nlm.nih.gov/LocusLink/

CHROMOSOMAL LOCATION

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

SOURCE

CD52 (FL-61) is a rabbit polyclonal antibody raised against amino acids 1-61 representing full length 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.

STORAGE

Store at 4° C, **D0 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.

APPLICATIONS

CD52 (FL-61) 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), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/ 2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try **CD52 (HI186): sc-51560**, our highly recommended monoclonal alternative to CD52 (FL-61).