

CD24 (C-20): sc-7034

BACKGROUND

CD24 is a GPI-linked membrane sialoglycoprotein that is expressed on pro-B, pre-B and mature B cells, and its expression is decreased after B cell activation. CD24 is also found on granulocytes and a small fraction of thymocytes and neuroblastomas, but not on plasma cells. CD24 may play a role in the regulation of B cell proliferation and differentiation. CD24 is expressed in hematological malignancies as well as in a large variety of solid tumors. A shift from apical localization to cytoplasmic staining of CD24 is a surrogate marker of stromal invasion in ovarian serous tumors of borderline malignancy. CD24 protein can be a B cell differentiation marker that is expressed on mature resting B cells and disappears upon stimulation.

CHROMOSOMAL LOCATION

Genetic locus: CD24 (human) mapping to 6q25.3.

SOURCE

CD24 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CD24 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-7034 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as fluorescein conjugate for immunofluorescence, sc-7034 FITC, 200 µg/1 ml.

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.

APPLICATIONS

CD24 (C-20) is recommended for detection of CD24 of human and rat 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), 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).

Suitable for use as control antibody for CD24 siRNA (h): sc-29978, CD24 shRNA Plasmid (h): sc-29978-SH and CD24 shRNA (h) Lentiviral Particles: sc-29978-V.

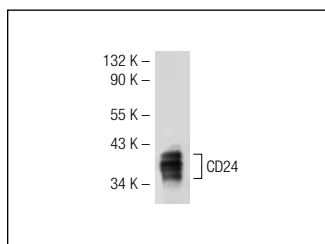
Molecular Weight of CD24: 35-45 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or rat spleen extract: sc-2397.

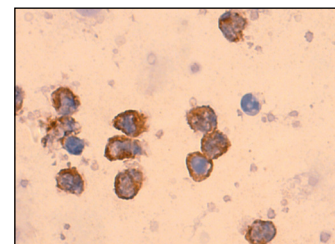
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



CD24 (C-20): sc-7034. Western blot analysis of CD24 expression in human PBL whole cell lysate.



CD24 (C-20): sc-7034. Immunoperoxidase staining of formalin-fixed human lymphocytes showing membrane localization.

SELECT PRODUCT CITATIONS

- Biade, S., et al. 2006. Gene expression profiling of human ovarian tumours. *Br. J. Cancer* 95: 1092-1192.
- Nanduri, L.S., et al. 2011. Regeneration of irradiated salivary glands with stem cell marker expressing cells. *Radiother. Oncol.* 99: 367-372.
- Wang, Z., et al. 2011. Clinicopathologic correlation of cancer stem cell markers CD44, CD24, VEGF and HIF-1 α in ductal carcinoma *in situ* and invasive ductal carcinoma of breast: an immunohistochemistry-based pilot study. *Pathol. Res. Pract.* 207: 505-513.
- Mukhopadhyay, K.D., et al. 2011. Isolation and characterization of a metastatic hybrid cell line generated by ER negative and ER positive breast cancer cells in mouse bone marrow. *PLoS ONE* 6: e20473.
- Oliveira-Costa, J.P., et al. 2012. Topoisomerase expression in oral squamous cell carcinoma: relationship with cancer stem cells profiles and lymph node metastasis. *J. Oral Pathol. Med.* 41: 762-768.



Try **CD24 (SN3): sc-19585** or **CD24 (HIS50): sc-33669**, our highly recommended monoclonal alternatives to CD24 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CD24 (SN3): sc-19585**.