

# CD24 (FL-80): sc-11406

## 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.

## REFERENCES

1. Kemshead, J.T., et al. 1982. Monoclonal antibodies defining markers with apparent selectivity for particular haemopoietic cell types may also detect antigens on cells of neural crest origin. *Hybridoma* 1: 109-123.
2. Hsu, S.M., et al. 1984. Phenotypic expression of B lymphocytes. Identification with monoclonal antibodies in normal lymphoid tissues. *Am. J. Pathol.* 114: 387-395.
3. Fischer, G.F., et al. 1990. Signal transduction in lymphocytic and myeloid cells via CD24, a new member of phosphoinositol-anchored membrane molecules. *J. Immunol.* 144: 638-641.

## CHROMOSOMAL LOCATION

Genetic locus: CD24 (human) mapping to 6p25.3; Cd24a (mouse) mapping to 10 B2.

## SOURCE

CD24 (FL-80) is a rabbit polyclonal antibody raised against amino acids 1-80 representing full length 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.

## APPLICATIONS

CD24 (FL-80) is recommended for detection of CD24 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 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 siRNA (m): sc-29979, CD24 shRNA Plasmid (h): sc-29978-SH, CD24 shRNA Plasmid (m): sc-29979-SH, CD24 shRNA (h) Lentiviral Particles: sc-29978-V and CD24 shRNA (m) Lentiviral Particles: sc-29979-V.

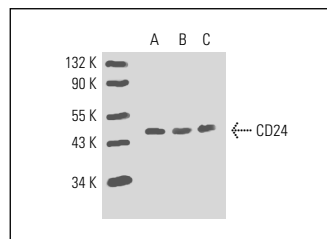
Molecular Weight of CD24: 35-45 kDa.

Positive Controls: WEHI-231 whole cell lysate: sc-2213, CTLL-2 cell lysate: sc-2242 or RAW 264.7 whole cell lysate: sc-2211.

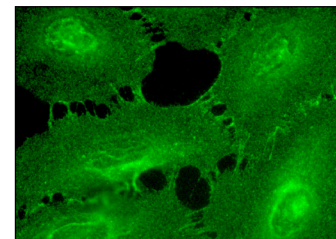
## STORAGE

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

## DATA



CD24 (FL-80): sc-11406. Western blot analysis of CD24 expression in WEHI-231 (A), RAW 264.7 (B) and CTLL-2 (C) whole cell lysates.



CD24 (FL-80): sc-11406. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

## SELECT PRODUCT CITATIONS

1. Katsuma, S., et al. 2002. Global analysis of differentially expressed genes during progression of calcium oxalate nephrolithiasis. *Biochem. Biophys. Res. Commun.* 296: 544-552.
2. Chen, C., et al. 2004. Inhibition of human CD24 binding to platelet-bound P-selectin by monoclonal antibody. *Proc. West. Pharmacol. Soc.* 47: 28-29.
3. Ostapkowicz, A., et al. 2006. Lipid rafts remodeling in estrogen receptor-negative breast cancer is reversed by histone deacetylase inhibitor. *Mol. Cancer Ther.* 5: 238-245.
4. Kim, J.B., et al. 2008. CD24 cross-linking induces apoptosis in, and inhibits migration of, MCF7 breast cancer cells. *BMC Cancer* 8: 118.
5. Lo, H.W., et al. 2009. A novel splice variant of GLI1 that promotes glioblastoma cell migration and invasion. *Cancer Res.* 69: 6790-6798.
6. Jiang, W., et al. 2011. CD24: A novel surface marker for PDX1-positive pancreatic progenitors derived from human embryonic stem cells. *Stem Cells* 29: 609-617.
7. Gupta, V., et al. 2011. Evaluation of anticancer agents using flow cytometry analysis of cancer stem cells. *Methods Mol. Biol.* 716: 179-191.
8. Duru, N., et al. 2012. HER2-associated radioresistance of breast cancer stem cells isolated from HER2-negative breast cancer cells. *Clin. Cancer Res.* 18: 6634-6647.

## RESEARCH USE

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



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