

Anti-Human CD24 Antibody, Clone 32D12

Antibodies

Mouse monoclonal IgG1 antibody
against human CD24, unconjugated

Catalog #60134

100 µg 1 mg/mL



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

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Product Description

The 32D12 antibody reacts with CD24, a 35 - 50 kDa glycosylphosphatidylinositol (GPI)-linked sialoglycoprotein that is anchored to the plasma membrane and is glycosylated variably depending on cell type. The function of CD24 has yet to be fully determined but it is believed to play a role in lymphocyte development, particularly in acting as a costimulatory molecule for CD4+ T cells and in regulating B cell proliferation, activation, differentiation, and apoptosis. CD24 may also function in cell adhesion and metastasis, likely through binding of CD62P (P-Selectin). CD24 is expressed by follicular dendritic cells, and various epithelial and hematopoietic cell types, including granulocytes, erythrocytes, most B cells, and subsets of T lymphocytes. As it is expressed throughout B cell development but is lost after differentiation into the plasma cell stage, CD24 may be used as a B cell differentiation marker. Furthermore, CD24 also has the potential to be a marker for tumor prognosis and diagnosis as it is highly expressed in numerous cancers including ovarian, breast, prostate, bladder, renal, and lung, as well as neuroblastomas and various hematological malignancies. Reportedly, the 32D12 antibody recognizes an epitope that is distinct from those recognized by clones VIB-C5, VIB-E3, LC66, BA-1, ML5, OKB2 and SN3 A5-2H10.

Target Antigen Name:	CD24
Alternative Names:	CD24a, Heat stable antigen, HSA, Ly-52, Nectadrin, Small cell lung carcinoma cluster 4 antigen
Gene ID:	100133941
Species Reactivity:	Human
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	32D12
Isotype:	IgG1, kappa
Immunogen:	Human pre-B lymphoblastic leukemia cell line Reh
Conjugate:	Unconjugated

Applications

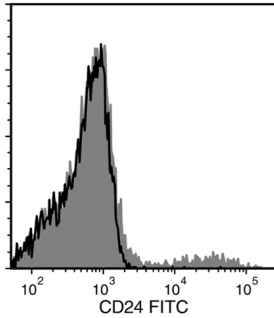
Verified:	FC
Reported:	FC, WB

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered saline
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com .
Directions for Use:	For flow cytometry the suggested use of this antibody is 1 µg per 1 x 10 ⁶ cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs; gated on lymphocytes) labeled with Anti-Human CD24 Antibody, Clone 32D12 followed by a rat anti-mouse IgG1 antibody, FITC (filled histogram), or a mouse IgG1, kappa isotype control antibody followed by a rat anti-mouse IgG1 antibody, FITC (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

1. Sahlberg SH et al. (2014) Evaluation of cancer stem cell markers CD133, CD44, CD24: association with AKT isoforms and radiation resistance in colon cancer cells. *PLoS One* 9(4): e94621. (FC)
2. Goldstein AS et al. (2011) Purification and direct transformation of epithelial progenitor cells from primary human prostate. *Nat Protoc* 6(5): 656–67. (FC)
3. Fogel M et al. (1999) CD24 is a marker for human breast carcinoma. *Cancer Lett* 143(1): 87–94. (FC)
4. Aigner S et al. (1997) CD24, a mucin-type glycoprotein, is a ligand for P-selectin on human tumor cells. *Blood* 89(9): 3385–95. (WB)
5. Migita M et al. (1995) Selection of transduced CD34+ progenitors and enzymatic correction of cells from Gaucher patients, with bicistronic vectors. *Proc Natl Acad Sci U S A* 92(26): 12075–9. (FC)
6. Pawliuk R et al. (1994) Selection of retrovirally transduced hematopoietic cells using CD24 as a marker of gene transfer. *Blood* 84(9): 2868–77. (FC)
7. Rasmussen AM et al. (1992) A new method for detachment of Dynabeads from positively selected B lymphocytes. *J Immunol Methods* 146(2): 195–202. (FC)
8. Kay R et al. (1991) CD24, a signal transducer modulating B cell activation responses, is a very short peptide with a glycosyl phosphatidylinositol membrane anchor. *J Immunol* 147(4): 1412–6. (FC, WB)
9. Pirruccello SJ & Lang MS. (1990) Differential expression of CD24-related epitopes in mycosis fungoides/Sézary syndrome: a potential marker for circulating Sézary cells. *Blood* 76(11): 2343–7. (FC)

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