

SCIENTIFIC BACKGROUND:

CD24 (Heat-Stable Antigen) is a heavily glycosylated 27 amino acid mucin-like protein that is bound to the plasma membrane by a glycosylphosphatidylinositol (GPI) anchor. CD24 is expressed by a variety of hematopoietic and epithelial cell types. The level of glycosylation is variable and cell type dependent.¹⁻⁴ In B cells, CD24 is expressed throughout development but is lost at the plasma cell stage.⁵ In the human mammary epithelium, CD24 is specific for luminal mammary epithelial cells where it is expressed at the apical plasma membrane.⁶ CD24 function is not well characterized, but preliminary studies indicate that it is a costimulatory molecule for CD4⁺ T cells and has a role in lymphocyte development and B-cell apoptosis.^{4,7,8} The only known ligand for CD24 is P-selectin.⁹

Product Information Sheet

ANTIBODIES



Version 1.2.0

ANTI-HUMAN CD24 BIOTIN

Biotin-Conjugated Mouse Monoclonal Antibody

Clone 32D12

Catalog #10231 100 tests

SPECIFICITY:

The 32D12 mouse monoclonal antibody recognizes human CD24. Other species have not been tested.

CLONE: 32D12

ISOTYPE: IgG₁, κ (Mouse)

IMMUNOGEN:

This mouse monoclonal antibody was generated using the human pre-B lymphoblastic leukemia cell line Reh.

FORMAT:

100 tests of biotin-conjugated antibody in 2 mL phosphate buffered saline (PBS) containing 0.1% (w/v) bovine serum albumin and 0.1% (w/v) sodium azide.

STABILITY AND STORAGE:

Store at 2-8°C. **Do not freeze.** Product is stable for at least 6 months.

APPLICATIONS AND DIRECTIONS FOR USE:

Centrifuge tube briefly before use to ensure recovery of entire contents.

Flow Cytometry:

This antibody is suitable for flow cytometry when used at 20 µL of antibody per 1 x 10⁶ cells resuspended in 100 µL (for a total volume of 120 µL). Optimal working dilution should be determined for each specific application. For flow cytometric detection, sample must be subsequently stained with a fluorochrome-conjugated reagent, such as, streptavidin-PE (e.g. Molecular Probes Catalog #S866), according to the manufacturer's specific instructions.

Cell Separation:

Anti-CD24 biotin labeled cells can also be used for cell separation in conjunction with **EasySep® Biotin Selection Kit** for human cells (Catalog #18553). The optimal working dilution of anti-CD24 biotin should be determined for the specific application.

REFERENCES:

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9. Sammar M, Aigner S, Hubbe M, Schirmmacher V, Schachner M, Vestweber D, Altevogt P: Heat-stable antigen (CD24) as ligand for mouse P-selectin. *Int Immunol* 6: 1027-36, 1994

Refer to Material Safety Data Sheet for more information.

**THIS REAGENT IS FOR RESEARCH ONLY.
IT IS NOT TO BE ADMINISTERED TO HUMANS.**

Hazardous Ingredient: Sodium Azide. Avoid exposure to skin and eyes, ingestion, and contact with heat, acids and metals. Wash exposed skin with soap and water. Flush eyes with water. Dilute with running water before discharging into plumbing.

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Revised:
February 2007