

Datasheet for ABIN967572

anti-CD24 antibody

2 Images

14 Publications



[Go to Product page](#)

Overview

Quantity:	0.1 mg
Target:	CD24
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This CD24 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunohistochemistry (Frozen Sections) (IHC (fro)), Cytotoxicity Test (CyTox), Immunohistochemistry (Formalin-fixed Sections) (IHC (f)), Immunohistochemistry (Zinc-fixed Sections) (IHC (zinc))

Product Details

Brand:	BD Pharmingen™
Immunogen:	C57BL/10 Mouse Splenic T Lymphocytes
Clone:	M1-69
Isotype:	IgG2b kappa
Characteristics:	<ol style="list-style-type: none"> 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Sodium azide is a reversible inhibitor of oxidative metabolism, therefore, antibody

Product Details

preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE™ (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
---------------	---

Target Details

Target:	CD24
---------	------

Alternative Name:	CD24 (CD24 Products)
-------------------	--

Background:	<p>The M1/69 antibody reacts with CD24 (Heat-Stable Antigen, HSA or HsAg), a variably glycosylated GPI-anchored membrane protein found on erythrocytes, granulocytes, monocytes, lymphocytes, and neurons. Hematopoietic stem cells of the embryonic yolk sac and fetal liver express CD24.5 Levels of expression of CD24 vary during differentiation of the T and B cell lineages. In the bone marrow, hematopoietic progenitors acquire CD24 expression upon commitment to the B-lymphocyte lineage. Immature B cells in the bone marrow and spleen of adult mice peripheral B lymphocytes express intermediate levels of CD24. The level of CD24 expression has been reported to rise upon activation of splenic B cells with LPS, but not with CD154 (CD40 Ligand). The majority of thymocytes express high levels of CD24, while most mature thymic and peripheral T lymphocytes do not express CD24. In contrast, TCR-bearing thymocytes which emigrate to the spleen are CD24+. Dendritic cells of the thymus, spleen, liver, and epidermal Langerhans cells have also been reported to express CD24. CD24 is not expressed by NK cells, as determined by staining with J11d mAb (ABIN967372). CD24 is involved in the costimulation of CD4+ T cells by B cells, it is a co-inducer of in vitro thymocyte maturation, and it is a ligand of CD62P (P-selectin). While the monoclonal antibodies 30-F1, M1/69, and J11d all react with CD24, they show subtle differences in the level of staining of different lymphocyte populations. When possible, investigators should continue to use the same monoclonal antibody as used in previous studies. This antibody is routinely tested by flow cytometric analysis.</p> <p>Synonyms: Heat Stable Antigen</p>
-------------	---

Pathways:	Regulation of Leukocyte Mediated Immunity , Positive Regulation of Immune Effector Process , Activated T Cell Proliferation
-----------	---

Application Details

Comment: Related Products: ABIN967372

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.5 mg/mL

Buffer: Aqueous buffered solution containing ≤ 0.09 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C

Storage Comment: Store undiluted at 4° C.

Publications

Product cited in: Hunte, Capone, Zlotnik, Rennick, Moore: "Acquisition of CD24 expression by Lin-CD43+B220(low)ckit(hi) cells coincides with commitment to the B cell lineage." in: **European journal of immunology**, Vol. 28, Issue 11, pp. 3850-6, (1998) ([PubMed](#)).

Cibotti, Punt, Dash, Sharrow, Singer: "Surface molecules that drive T cell development in vitro in the absence of thymic epithelium and in the absence of lineage-specific signals." in: **Immunity**, Vol. 6, Issue 3, pp. 245-55, (1997) ([PubMed](#)).

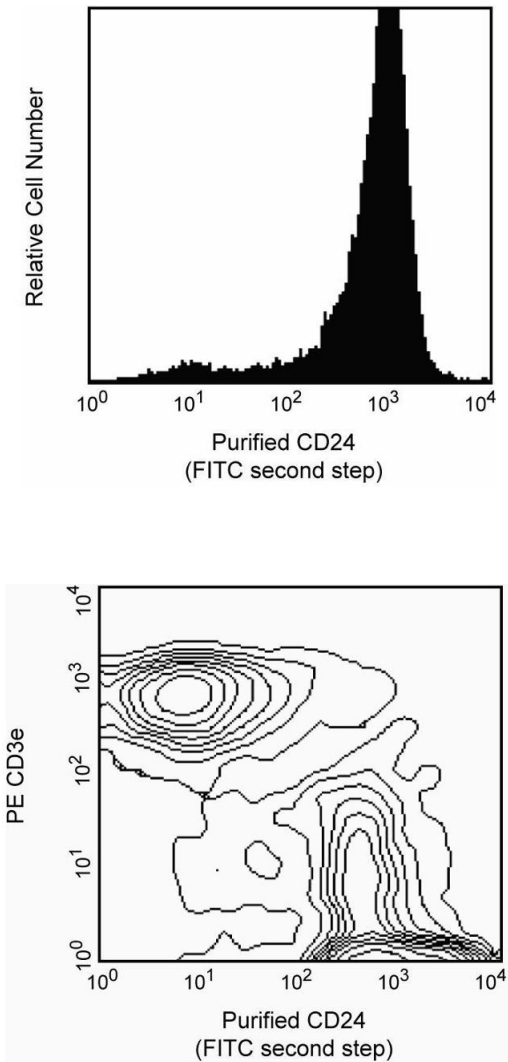
Calaora, Chazal, Nielsen, Rougon, Moreau: "mCD24 expression in the developing mouse brain and in zones of secondary neurogenesis in the adult." in: **Neuroscience**, Vol. 73, Issue 2, pp. 581-94, (1997) ([PubMed](#)).

Aigner, Ruppert, Hubbe, Sammar, Stoecker, Butcher, Vestweber, Altevogt: "Heat stable antigen (mouse CD24) supports myeloid cell binding to endothelial and platelet P-selectin." in: **International immunology**, Vol. 7, Issue 10, pp. 1557-65, (1996) ([PubMed](#)).

Auerbach, Huang, Lu: "Hematopoietic stem cells in the mouse embryonic yolk sac." in: **Stem cells (Dayton, Ohio)**, Vol. 14, Issue 3, pp. 269-80, (1996) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)

Images



Flow Cytometry

Image 1. Diffrential expression of CD24 on thymocytes and peripheral T lymphocytes. BALB/c thymocytes were stained with purified mAb M1/69 followed by FITC-conjugated anti-rat Ig kappa light chain mAb MRK-1 (first panel). BALB/c splenocytes were simultaneously stained with purified mAb M1/69 and PE-conjugated anti-mouse CD3e mAb 145-2C11 followed by mAb MRK-1 (second panel). Flow cytometry was performed on a BD FACScan™ flow cytometry system.

Flow Cytometry

Image 2. BALB/c splenocytes were simultaneously stained with purified mAb M1/69 and PE-conjugated anti-mouse CD3e mAb 145-2C11 followed by mAb MRK-1 (second panel). Flow cytometry was performed on a BD FACScan™ flow cytometry system.