

Datasheet for ABIN2689320

anti-CD5 antibody

18 Publications



Overview

Quantity:	0.5 mg
Target:	CD5
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This CD5 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Immunoprecipitation (IP), ELISA, Immunohistochemistry (Formalinfixed Sections) (IHC (f)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Cytotoxicity Test (CyTox), Blocking Reagent (BR)

Product Details

Brand:	BD Pharmingen™
Immunogen:	Mouse Thymus / Spleen
Clone:	53
Isotype:	IgG2a kappa
Characteristics:	The 53-7.3 clone has been reported to react with a monomorphic epitope of CD5, a member of
	the scavenger receptor cysteine-rich protein superfamily and the major ligand of CD72, found
	on thymocytes, T lymphocytes, thymic NK-T cells, and a subset of B lymphocytes, but not on
	NK cells or splenic NK-T cells. The level of surface CD5 expression is developmentally regulated
	in the thymus, starting with low levels on CD4-CD8- thymocytes and increasing as they mature
	to CD4+CD8+ then CD4+CD8- or CD4-CD8+ thymocytes. Relatively high levels are maintained

on peripheral T lymphocytes. The level of CD5 antigen detected on T helper cells has been reported to be somewhat higher than that on T cytotoxic/suppressor and B cells. Few, if any, intestinal intraepithelial lymphocytes bearing the $\gamma\delta$ T-cell receptor express CD5. Phenotypic, anatomical, functional, developmental, and pathogenic characteristics of peripheral CD5+ B cells suggest that they may represent a distinct lineage, known as B-1 cells. The frequency of these CD5+ B cells has been reported to show strain-dependent variation. An additional population of CD5+ B lymphocytes resides in the thymus, where it matures from intrathymic B-cell progenitors. It has been proposed that CD5 is a costimulatory molecule which mediates interactions of cells in the immune system and negatively regulates signal transduction mediated by the T-cell receptor and B-cell receptor. This antibody is routinely tested by flow cytometric analysis. Other applications were tested during antibody development only or reported in the literature.

BD Pharmingen™ Purified Rat Anti-Mouse CD5 - Purified - Clone 53-7.3 - Isotype Rat IgG2a, κ - Reactivity Ms - 0.5 mg

Purification:

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

Target Details

Target:	CD5
Alternative Name:	CD5 (CD5 Products)
Background:	Synonyms: Ly-1

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

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

Handling

	should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.
Publications	
Product cited in:	Lanier: "Natural killer cell receptor signaling." in: Current opinion in immunology , Vol. 15, Issue 3

Lanier: "Natural killer cell receptor signaling." in: **Current opinion in immunology**, Vol. 15, Issue 3, pp. 308-14, (2003) (PubMed).

Azzam, Grinberg, Lui, Shen, Shores, Love: "CD5 expression is developmentally regulated by T cell receptor (TCR) signals and TCR avidity." in: **The Journal of experimental medicine**, Vol. 188, Issue 12, pp. 2301-11, (1999) (PubMed).

Bikah, Lynd, Aruffo, Ledbetter, Bondada: "A role for CD5 in cognate interactions between T cells and B cells, and identification of a novel ligand for CD5." in: **International immunology**, Vol. 10, Issue 8, pp. 1185-96, (1998) (PubMed).

Yashiro, Tai, Toyo-oka, Park, Abe, Hamaoka, Kobayashi, Neben, Fujiwara: "A fundamental difference in the capacity to induce proliferation of naive T cells between CD28 and other costimulatory molecules." in: **European journal of immunology**, Vol. 28, Issue 3, pp. 926-35, (1998) (PubMed).

Bendelac, Rivera, Park, Roark: "Mouse CD1-specific NK1 T cells: development, specificity, and function." in: **Annual review of immunology**, Vol. 15, pp. 535-62, (1997) (PubMed).

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