

Technical Data Sheet

FITC Mouse Anti-Mouse CD72 a, b, and d Alloantigens

Product Information

Material Number:	550966
Alternate Name:	Lyb-2.1, Lyb-2.2, and Lyb-2.4
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	K10.6
Immunogen:	(C57BL/6 • DBA/2)F1 hybrid mouse pre-B-cell leukemia line 70Z/3
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The K10.6 antibody reacts with Lyb-2.1, Lyb-2.2, and Lyb-2.4 (CD72 a, b, and d alloantigens, respectively). CD72 is a 45-kDa type-II membrane protein, containing a C-type lectin-like domain and ITIM and ITIM-like sequences in the cytoplasmic tail. CD72 is expressed at all stages of B-lymphocyte development except plasma cells, and it has been shown to negatively regulate B-cell receptor signaling. Analysis of CD72-deficient mice supports these results and shows that CD72 is involved in B-cell development. CD72-stimulated B cells show a transient association of CD19 with CD72, as well as an increase in Tyr-phosphorylation of CD19. CD72 is reported to be a ligand for CD5, although this is controversial. It is also reported to be a ligand for CD100 (Sema4D). The CD72 alloantigens Lyb-2.1 (originally identified as Ly-m19.2), Lyb-2.2 (originally identified as Ly-32.2), Lyb-2.3, and Lyb-2.4 are encoded by the Cd72[a], Cd72[b], Cd72[c], and Cd72[d] alleles, respectively. Lyb-2.1 is expressed on B lymphocytes of CBA/J, C3H/BI, C57BR, C57L, C58, DBA/1, DBA/2, and SWR strains. Lyb-2.2 is expressed on B lymphocytes, a subset of peripheral T cells, and activated T lymphocytes in A, BALB/c, CBA/H, C3H/He, C57BL, PL, and 129 strains. Lyb-2.4 is expressed on a subset of splenocytes of the STS/A strain. K10.6 antibody does not react with Lyb-2.3 (AKR and SJL strains) nor with non-lymphoid tissues. Five serological specificities of CD72 alloantigens have been described and the nomenclature CD72.1, CD72.2, CD72.3, CD72.4, and CD72.5 proposed, which does not correspond to the names of the alleles. Some authors have referred to the specificity of mAb K10.6 as CD72.4.

Preparation and Storage

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

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Store undiluted at 4°C.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
559532	FITC Mouse IgG2b, κ Isotype Control	0.25 mg	MPC-11

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols 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.

References

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