Technical Data Sheet

Purified Mouse Anti-Human CD54

Product Information

Material Number:	**559047**
Alternate Name:	Human ICAM-1, HICAM-1
Size:	0.2 mg
Concentration:	1.0 mg/ml
Clone:	LB-2
Immunogen:	Major histocompatibility Class II antigen negative variant of human B-lymphoblastoid cell line
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human
Workshop:	IV B50, M165
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Anti-ICAM-1 (CD54) monoclonal antibody (clone LB-2) recognizes an inducible 76- to 110 kD glycoprotein, intercellular adhesion molecule-1 (ICAM-1), the CD54 antigen, that is expressed on human myeloma cells, Burkitt's lymphoma cells, erythroleukemia cells, B-lymphoblastoid cells, monocytes, and granulocytes, but not on T-cell lines, resting T lymphocytes or T-cell leukemias.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4°C.

Application Notes

Application

Flow cytometry	Routinely Tested
Functional assay	Reported
Immunoprecipitation	Reported
Immunohistochemistry	Reported

Recommended Assay Procedure:

Functional Studies: ICAM-1 is a ligand for both the leukocyte function-associated antigen-1 (LFA-1) and Mac-1, and thereby mediates the adhesion of leukocytes to endothelial cells. Leukocyte binding to endothelial cells is a critical process in inflammatory responses such as rheumatoid arthritis, adult respiratory distress syndrome, chronic dematoses, and reperfusion myocardial injury. Anti-ICAM-1 monoclonal antibody (clone LB-2) inhibits phorbol ester-enhanced aggregation of EBV-B or lectin-activated normal blood mononuclear cells. Anti-ICAM-1 (clone LB-2) is specific for a functional epitope on ICAM-1 and inhibits LFA-1-ICAM-1 interactions.

Immunoprecipitation: Under reducing conditions, anti-ICAM-1 monoclonal antibody (clone LB-2) immunoprecipitates a glycoprotein from EBV-immortalized B lymphocytes (EBV-B) with a molecular mass of 84 kDa by gel electrophoresis, while under nonreducing conditions a molecular mass of 77 kDa was observed.

Immunohistology: Anti-ICAM-1 monoclonal antibody (clone LB-2) can be used for immunohistochemistry staining.

Suggested Companion Products

Catalog Number	Name	Size	Clone
555740	Purified Mouse IgG2b κ Isotype Control	0.1 mg	27-35
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal

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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