Technical Data Sheet

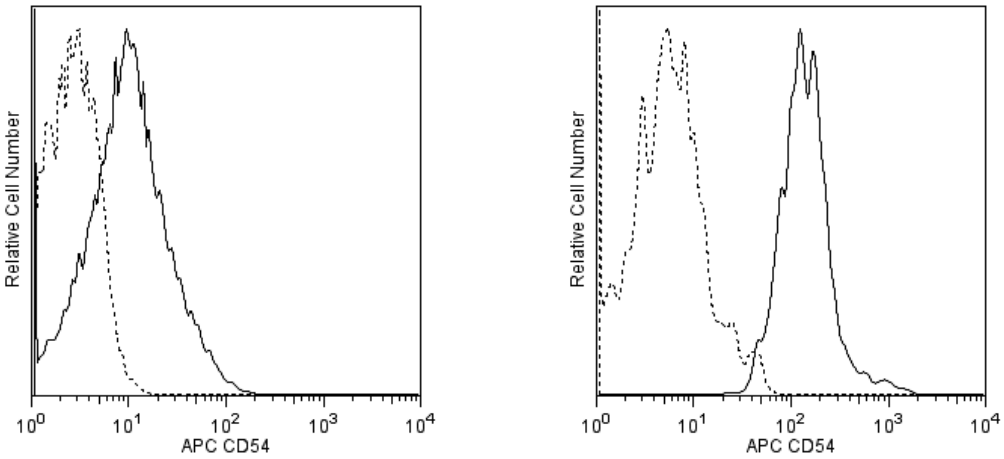
APC Hamster Anti-Mouse CD54

Product Information

Material Number:	**561605**
Alternate Name:	ICAM-1
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	3E2
Isotype:	Armenian Hamster IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 3E2 antibody reacts with CD54 (ICAM-1), a 95-kDa member of the Ig superfamily found on lymphocytes, vascular endothelium, high endothelial venules, epithelial cells, macrophages, and dendritic cells. ICAM-1 is a ligand for LFA1 (CD11a/CD18) and Mac-1 (CD11b/CD18). Its expression is upregulated upon stimulation by inflammatory mediators such as cytokines and LPS. Studies with mouse *Icam1*-transfected antigen-presenting cells, with CD54-blocking antibodies, and in CD54-deficient mice indicate that CD54 participates in inflammatory reactions and antigen-specific immune responses. In addition, there is evidence that CD54 is a receptor involved in MHC-non-restricted responses to weakly immunogenic tumor cells. The 3E2 antibody has been reported to block *in vitro* and *in vivo* intracellular adhesion events involved in immune responses.



Flow cytometric analysis for CD54 on activated and resting mouse spleen cells. *Resting (Left Panel) or lipopolysaccharide (LPS)-stimulated (2 days, Right Panel) BALB/c mouse spleen cells were stained either with an APC Armenian Hamster IgG1, κ Isotype Control (Cat No. 553974, dashed line histogram) or with the APC Armenian Hamster Anti-Mouse CD54 antibody (Cat No. 561605, solid line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable splenocytes or lymphoblast cells. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.*

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

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

The antibody was conjugated to APC under optimum conditions, and unconjugated antibody and free APC were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
553974	APC Hamster IgG1, κ Isotype Control	0.1 mg	A19-3
554656	Stain Buffer (FBS)	500 ml	(none)

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. 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.
5. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

References

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