

Technical Data Sheet

V450 Hamster Anti-Mouse CD69

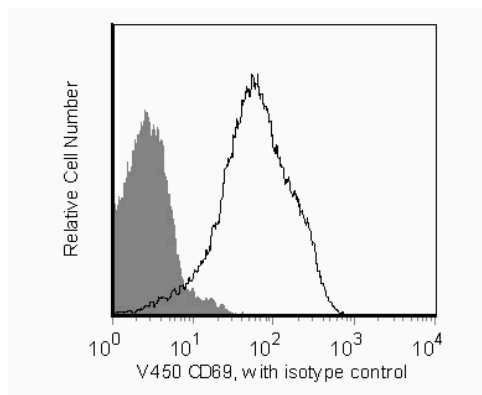
Product Information

Material Number:	560690
Alternate Name:	VEA; Very Early Activation Antigen; AIM; Activation Induced Molecule
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	H1.2F3
Immunogen:	Mouse Dendritic Epidermal T Cell Line Y245
Isotype:	Armenian Hamster IgG1, λ3
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

Description

The H1.2F3 monoclonal antibody specifically binds to CD69 (Very Early Activation antigen), an 85 kDa disulfide-linked homodimer of differentially glycosylated subunits. CD69 is a C-type lectin, most closely related to the NKR-P1 and Ly-49 NK cell-activation molecules. Its expression is rapidly induced upon activation of lymphocytes (T, B, NK, and NK-T cells), neutrophils, and macrophages. CD69 is expressed also on thymocytes that are undergoing positive selection; its role in that process is unclear. H1.2F3 mAb augments PMA-induced T-cell stimulation and IFN-γ-induced macrophage stimulation. IL-2-activated NK cells express CD69, and H1.2F3 mAb induces redirected lysis of FcR-bearing target cells by NK cells.

The antibody is conjugated to BD Horizon™ V450, which has been developed for use in multicolor flow cytometry experiments and is available exclusively from BD Biosciences. It is excited by the Violet laser Ex max of 406 nm and has an Em Max at 450 nm. Conjugates with BD Horizon™ V450 can be used in place of Pacific Blue™ conjugates.



Flow cytometric analysis of CD69 on stimulated mouse splenocytes. BALB/c splenocytes were stimulated for 5 hours at 37°C with 10 ng/mL PMA (Sigma-Aldrich Cat. No. P-8139) and stained either with a BD Horizon™ V450 Hamster IgG1, λ1 isotype control (shaded) or with the BD Horizon™ V450 Hamster Anti-Mouse CD69 antibody (unshaded). Histograms were derived from gated events based on light scattering characteristics for splenocytes. Flow cytometry was performed on a BD™ LSR II flow cytometry 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 with BD Horizon™ V450 under optimum conditions, and unreacted BD Horizon™ V450 was removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
560552	V450 Hamster IgG1, λ1 Isotype Control	0.1 mg	G235-2356

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.

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2. An isotype control should be used at the same concentration as the antibody of interest.
3. BD Horizon™ V450 has a maximum absorption of 406 nm and maximum emission of 450 nm. Before staining with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
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. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/documents/hamster_chart_11x17.pdf.
6. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
8. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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