

## Technical Data Sheet

## BV510 Hamster Anti-Mouse CD69

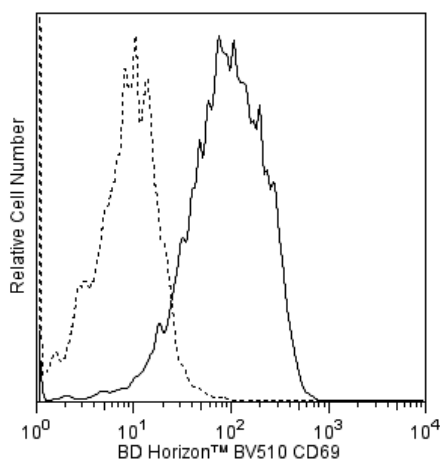
## Product Information

<b>Material Number:</b>	<b>563030</b>
<b>Alternate Name:</b>	VEA; Very Early Activation Antigen; AIM; Activation Induced Molecule
<b>Size:</b>	50 µg
<b>Concentration:</b>	0.2 mg/ml
<b>Clone:</b>	H1.2F3
<b>Immunogen:</b>	Mouse Dendritic Epidermal T Cell Line Y245
<b>Isotype:</b>	Armenian Hamster IgG1, λ3
<b>Reactivity:</b>	QC Testing: Mouse
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA 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 was conjugated to BD Horizon™ BV510 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 405-nm and Em Max at 510-nm, BD Horizon™ BV510 can be excited by the violet laser and detected in the BD Horizon V500 (525/50-nm) filter set. BD Horizon™ BV510 conjugates are useful for the detection of dim markers off the violet laser.



**Flow cytometric analysis of CD69 expression on stimulated mouse splenocytes.** BALB/c splenocytes were stimulated for 5 hours at 37°C with 10 ng/mL Phorbol 12-Myristate 13-Acetate (PMA; Sigma-Aldrich, Cat. No. P-8139). The cells were then stained with either BD Horizon™ BV510 Hamster IgG1, λ1 Isotype Control (Cat. No. 562954; dashed line histogram) or with the BD Horizon™ BV510 Hamster anti-Mouse CD69 antibody (Cat. No. 563030; solid line histogram). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable 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 with BD Horizon™ BV510 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV510 were removed.

## Application Notes

## Application

Flow cytometry	Routinely Tested
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## Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
562954	BV510 Hamster IgG1, λ1 Isotype Control	50 µg	G235-2356

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## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
5. 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.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
7. Brilliant Violet™ 510 is a trademark of Sirigen.
8. 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](http://www.bdbiosciences.com/documents/hamster_chart_11x17.pdf).

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