

Technical Data Sheet

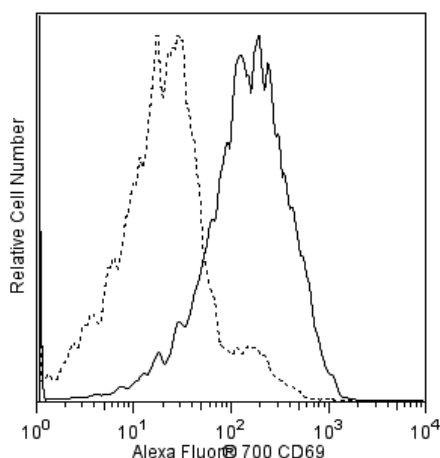
Alexa Fluor® 700 Hamster Anti-Mouse CD69

Product Information

| | |
|-------------------------|--|
| Material Number: | 561238 |
| 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.



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) and stained either with an Alexa Fluor® 700 Hamster IgG1, λ1 Isotype Control (Cat. No. 560555; dashed line histogram) or with the Alexa Fluor® 700 Hamster Anti-Mouse CD69 antibody (Cat. No. 561238; solid line histogram). 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

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

The antibody was conjugated to Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed.

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

Application Notes

Application

Flow cytometry

Routinely Tested

BD Biosciences

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|---------------|--------------|---------------|--------------|--------------|-------------------------|
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Suggested Companion Products

| <u>Catalog Number</u> | <u>Name</u> | <u>Size</u> | <u>Clone</u> |
|-----------------------|--|-------------|--------------|
| 560555 | Alexa Fluor® 700 Hamster IgG1, λ 1 Isotype Control | 0.1 mg | G235-2356 |
| 554656 | Stain Buffer (FBS) | 500 ml | (none) |

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/pharming/en/protocols for technical protocols.
4. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
5. Alexa Fluor® 700 has an adsorption maximum of ~700nm and a peak fluorescence emission of ~720nm. Before staining cells with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
6. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
7. 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.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

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