

**PRODUCT INSERT
HAMSTER anti-MOUSE CD69**

Product Code	Form	Volume	Antibody*	Excitation (nm)	Peak Emission (nm)	Matching Isotype Controls	
HM4000	Purified	1.0 ml	200 µg	N/A	N/A	Hamster IgG Purified	Code HM00
HM4028	Pacific Blue™	1.0 ml	100 µg	405	455	Hamster IgG Pacific Blue™	Code HM28
HM4001	FITC	1.0 ml	100 µg	488	525	Hamster IgG FITC	Code HM01
HM4001-3	FITC	3.0 ml	300 µg				
HM4004	R-PE	0.5 ml	50 µg	488	575	Hamster IgG R-PE	Code HM04
HM4004-3	R-PE	3.0 ml	300 µg				
HM4017	PE-TR [†]	0.5 ml	100 µg	488	615	Hamster IgG PE-TR	<i>Under development</i>
HM4006	TC [‡]	0.5 ml	100 µg	488	667	Hamster IgG TC	Code HM06
HM4015	Biotin	1.0 ml	100 µg	N/A	N/A	Hamster IgG Biotin	Code HM15
HM4015-3	Biotin	3.0 ml	300 µg				

PRODUCT DESCRIPTION

Hamster monoclonal antibody to mouse CD69

Clone: H1.2F3

Isotype: Hamster IgG

Immunogen: murine dendritic epidermal T cell line Y245^{1,2}

Lot No.: See label

Expiration: See label

Buffer: Phosphate buffered saline (PBS)

Preservatives: 0.1% *sodium azide*. Sodium azide is an extremely toxic and dangerous compound particularly when combined with acids or metals. Solutions containing sodium azide should be disposed of properly.

Stabilizer: For conjugated products only, a highly purified grade of BSA has been added as a stabilizing protein.

STORAGE AND HANDLING

Store reagents at 2-8°C. Light exposure should be avoided with fluorochrome conjugated reagents. Use dim light during handling, incubation with cells and prior to analysis. If the reagent is being diluted, it is recommended that only the quantity to be used within one week be diluted.

PRODUCT CHARACTERIZATION

Antigen Specificity: The H1.2F3 monoclonal antibody (mAb) reacts with mouse CD69, also known as Very Early Activation (VEA) Antigen, which is inducibly expressed on T cells, B cells, NK cells, monocytes, and neutrophils^{1,3}. CD69 acts as a costimulatory molecule for T cell activation and proliferation and plays a role in the activation and differentiation of a wide variety of hematopoietic cells³. The H1.2F3 mAb induces T cell proliferation in the presence of PMA and FcR-bearing accessory cells¹. Other applications of the H1.2F3 mAb include immunoprecipitation and immunostaining for flow cytometry.

PRODUCT QUALITY CONTROL

Every lot is tested by flow cytometry using freshly harvested mouse splenocytes and either LPS or Con A activated mouse splenocytes. From this testing it is recommended that between 0.1 and 0.25µg of antibody be used per 1 x 10⁶ cells in a 100µl staining volume. Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for their application.

REFERENCES

1. Yokoyama, W.M., F. Koning, P.J. Kehn, G.M.B. Pereira, G. Stingl, J.E. Colligan, and E.M. Shevach. 1988. Characterization of a cell surface-expressed disulfide-linked dimer involved in murine T cell activation. *J. Immunol.* 141: 369-376.
2. Yokoyama, W.M., S.R. Maxfield, and E.M. Shevach. 1989. Very Early (VEA) and Very Late (VLA) activation antigens have distinct functions in T lymphocyte activation. *Immunol. Rev.* 109: 153-176.
3. Ziegler, S.F., S.D. Levin, L. Johnson, N.G. Copeland, D.J. Gilbert, N.A. Jenkins, E. Baker, G.R. Sutherland, A.L. Feldhaus, and F. Ramsdell. 1994. The mouse CD69 gene. Structure, expression, and mapping to the NK gene complex. *J. Immunol.* 152: 1228-1236.

* Antibody value assigned is based on the Optical Density at 280 nm.

† TR, Texas Red®

‡ TC, TRI-COLOR®, PE-Cy5

The efficiency of energy transfer in tandem dyes can be significantly decreased by exposure to visible light. We recommend that longer wavelength fluorochrome conjugates, e.g. PE-Cy7, PE-Alexa Fluor® 700, be protected from light during staining and while awaiting analysis, e.g. cover with aluminum foil.

FIX & PERM® and **COMBI-IC** reagents are produced for Caltag Laboratories by An Der Grub Bio Research GmbH, Austria.

The Texas Red®, Alexa Fluor® and Pacific Blue® dye conjugates in this product are sold under license from Molecular Probes, Inc., for research use only or as analyte specific reagents, except for use in combination with microarrays or high content screening, and are covered by pending and issued patents.

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