invitrogen™ | MOLECULAR PROBES®

PRODUCT INSERT

MONOCLONAL ANTIBODIES TO THE HUMAN GRANZYME B ANTIGEN

Product Code	Form	Volume	Tests	Excitation (nm)	Peak Emission (nm)	Matching Isotype Controls	
MHGB04	R-PE	0.5 ml	100 min.	488	575	Mouse IgG1 R-PE	Code MG104
MHGB05	APC	0.5 ml	100 min.	600-650	660	Mouse IgG1 APC	Code MG105

DESCRIPTION

Mouse monoclonal antibody to human Granzyme B

Clone: GB12

Isotype: Mouse IgG1

Lot No.: See label **Expiration:** See label

Buffer: Phosphate buffered saline (PBS)

Preservative: 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 agent.

STORAGE & HANDLING

Store reagents at 2-8°C. For fluorochrome-conjugated antibodies only, light exposure should be avoided. Use dim light during handling, incubation with cells and prior to analysis. It is recommended that investigators dilute only the quantity to be used within one week.

PRODUCT CHARACTERIZATION

Antigen Specificity: According to the literature this antibody recognizes the serine protease, granzyme B[1]. This enzyme is involved in apoptotic cell death. Granzyme B, as well as other enzymes contained in lytic granules, is released primarily by cytotoxic T lymhocytes (CTLs).

Leukocyte Workshop Status: N/A

PRODUCT QUALITY CONTROL

Each lot is tested by flow cytometry using peripheral blood leukocytes. Based on this testing it is recommended that 5 µl of antibody be used per 1 x 10^6 cells. Because results may vary, it is suggested that each investigator determine the optimal amount of antibody to be used for each application.

REFERENCES:

1. Spaeny-Dekking, E.H.A., W.L. Hanna, A.M. Wolbink, P.C. Wever, A.J. Kummer, A.J. Middeldrop, H.G. Huisman, C.J. Froelich, and C.E. Hack. 1998. *J. Immunol*. 160: 3610.
2. Andrade, F., S. Roy, D. Nicholson, N. Thornberry, A. Rosen, and L. Casciola-Rosen. 1998. *Immunity* 8: 451.
3. Berthou, C., J.P. Marolleau, C. Lafaurie, A. Soulie, L. Dal Cortivo, J.F. Bourge, M. Benbunan, and M. Sasportes. 1995. *Blood* 9: 3500.
4. Zapata, J.M., R. Takahashi, G.S. Salvesen, and J.C. Reed. 1998. *J. Biol. Chem.* 273: 6916.
5. Kummer, J.A., A.M. Kamp, T.M. Tadema, W. Vos, C.J. Meijer, and C.E.Hack. 1995. *Clin. Exp. Immunol.* 100: 164.
6. Kummer, J.A., A.M. Kamp, M. Van Katwijk, J.P. Brakenhoff, K. Radosevic, A.M. Van Leeuwen, J. Borst, C.L. Verweij, and C.E. Hack. 1993. *J. Immunol. Meth.* 163: 77.
7. Renner, C., G. Held, S. Ohnesorge, S. Bauer, K. Gerlach, J.P. Pifitzenmeier, and M. Pfreundschuh. 1997. *Cancer Immunol. Immunother*. 44: 70.
8. Shi, L., S. Mai, S. Israels, K. Browne, J.A. Trapani, and A.H. Greenberg. 1997. *J. Exp.Med.* 185: 855.
9. Fitzpatrick, L., A.P. Makrigiannis, M. Kaiser, and D.W. Hoskin. 1996. *J. Interferon, Cytokine Res.* 16: 537.

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