

AM26699AF-N**Monoclonal Antibody to HLA class II DM alpha / HLA-DMA - Azide Free**

Alternate names:	DM alpha chain, DMA, HLA class II histocompatibility antigen, MHC class II antigen DMA, RING6, Really interesting new gene 6 protein
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	MHC (major histocompatibility complex) class II molecules are transmembrane glycoproteins expressed on the surface of professional antigen-presenting cells, such as macrophages, dendritic cells and B cells. Before their exposition on the cell surface, the MHC class II molecules react with endocytosed exogenous antigens, which are then presented to the T cells. The antigen-binding groove between MHC class II alpha and beta chain is open at both ends and is 15-24 amino acid residues long.
Uniprot ID:	P28067
NCBI:	NP_006111.2
GeneID:	3108
Host / Isotype:	Rat / IgG2b
Recommended Isotype Controls:	SM19A
Clone:	M5/114
Immunogen:	Activated C57BL/6 mouse spleen cells
Format:	State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Purification: Protein-G Affinity Chromatography Buffer System: Azide free phosphate buffered saline (PBS), approx. pH 7.4; 0.2 µm filter sterilized
Applications:	Flow Cytometry: 2 µg/ml. Immunoprecipitation. Western blot. Immunohistochemistry on Paraffin Sections. Immunohistochemistry on Frozen Sections. Functional Application: Blocking of T cell proliferative responses. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The antibody reacts with murine MHC class II glycoproteins. It recognizes a shared determinant on I-Ab, I-Ad, I-Aq, and I-Ed, I-Ek alloantigens, but it does not react with I-Af, I-Ak, I-As. This antibody can inhibit I-A-restricted T cell responses of the H-2b, H-2d, H-2q, H-2u but not H-2f, H-2k, H-2s haplotypes.
Species Reactivity:	Tested: Mouse

Storage:

Store undiluted at 2-8°C.

DO NOT FREEZE!

Shelf life: one year from despatch.

General Readings:

1. Bhattacharya A, Dorf ME, Springer TA. A shared alloantigenic determinant on Ia antigens encoded by the I-A and I-E subregions: evidence for I region gene duplication. *J Immunol.* 1981 Dec;127(6):2488-95. PubMed PMID: 6170707.
2. Viville S, Neefjes J, Lotteau V, Dierich A, Lemeur M, Ploegh H, et al. Mice lacking the MHC class II-associated invariant chain. *Cell.* 1993 Feb 26;72(4):635-48. PubMed PMID: 7679955.
3. De Souza Leao S, Lang T, Prina E, Hellio R, Antoine JC. Intracellular *Leishmania amazonensis* amastigotes internalize and degrade MHC class II molecules of their host cells. *J Cell Sci.* 1995 Oct;108 (Pt 10):3219-31. PubMed PMID: 7593283.
4. Kleijmeer M, Ramm G, Schuurhuis D, Griffith J, Rescigno M, Ricciardi-Castagnoli P, et al. Reorganization of multivesicular bodies regulates MHC class II antigen presentation by dendritic cells. *J Cell Biol.* 2001 Oct 1;155(1):53-63. PubMed PMID: 11581285.
5. Beers C, Burich A, Kleijmeer MJ, Griffith JM, Wong P, Rudensky AY. Cathepsin S controls MHC class II-mediated antigen presentation by epithelial cells in vivo. *J Immunol.* 2005 Feb 1;174(3):1205-12. PubMed PMID: 15661874.
6. Kuwano Y, Prazma CM, Yazawa N, Watanabe R, Ishiura N, Kumanogoh A, et al. CD83 influences cell-surface MHC class II expression on B cells and other antigen-presenting cells. *Int Immunol.* 2007 Aug;19(8):977-92. PubMed PMID: 17804692.
7. Zang W, Kalache S, Lin M, Schroppel B, Murphy B. MHC Class II-mediated apoptosis by a nonpolymorphic MHC Class II peptide proceeds by activation of protein kinase C. *J Am Soc Nephrol.* 2005 Dec;16(12):3661-8. Epub 2005 Oct 12. PubMed PMID: 16221866.
8. Clausen BE, Waldburger JM, Schwenk F, Barras E, Mach B, Rajewsky K, et al. Residual MHC class II expression on mature dendritic cells and activated B cells in RFX5-deficient mice. *Immunity.* 1998 Feb;8(2):143-55. PubMed PMID: 9491996.