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## AM26708PU-N Monoclonal Antibody to HLA Class II DR - Purified

Alternate names: HLA class II histocompatibility antigen DR, HLA-DR, MHC class II antigen DR

Quantity: 0.1 mg
Concentration: 1.0 mg/ml

Background: HLA-DR, a member of MHC class II glycoproteins, that bind intracellularly processed

peptides and present them to the Th cells, is composed of 36 kDa alpha chain and 27 kDa beta chain, both anchored in the plasma membrane. Together with other MHC II molecules HLA-DR plays a central role in the immune system. It is expressed on antigen-presenting cells (dendritic cells, B lymphocytes, monocytes, macrophages).

Host / Isotype: Mouse / IgG2a Recommended Isotype AM03096PU-N

**Controls:** 

Clone: L243

Immunogen: Human B lymphocytes

Format: State: Liquid purified IgG fraction (> 95% by SDS-PAGE)

Purification: Affinity Chromatography on Protein A

Buffer System: PBS, pH~7.4

Preservatives: 15 mM Sodium Azide

Applications: Flow Cytometry.

Immunoprecipitation.

Western blot.

Immunohistochemistry on Paraffin Sections. Immunohistochemistry on Frozen Sections.

Immunocytochemistry.

Functional Application: blocking.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody recognizes specifically HLA-DR molecules, both peptide-loaded and

empty.

Species Reactivity: Tested: Human, Non-Human Primates, Canine (Dog)

Storage: Store undiluted at 2-8°C.

DO NOT FREEZE!

Shelf life: one year from despatch.

Product Citations: Originator or purchased from resellers:

1. Coral S, Pucillo C, Leonardi A, Fonsatti E, Altomonte M, Maio M. Triggering of HLA-DR antigens differentially modulates tumor necrosis factor alpha release by B cells at distinct stage of maturation. Cell Growth Differ. 1997 May;8(5):581-8. PubMed PMID:

9149909.

2. Cantin R, Martin G, Tremblay MJ. A novel virus capture assay reveals a differential acquisition of host HLA-DR by clinical isolates of human immunodeficiency virus type



1 expanded in primary human cells depending on the nature of producing cells and the donor source. J Gen Virol. 2001 Dec;82(Pt 12):2979-87. PubMed PMID: 11714974.

- 3. Muczynski KA, Ekle DM, Coder DM, Anderson SK. Normal human kidney HLA-DRexpressing renal microvascular endothelial cells: characterization, isolation, and regulation of MHC class II expression. J Am Soc Nephrol. 2003 May;14(5):1336-48. PubMed PMID: 12707403.
- 4. Bouillon M, El Fakhry Y, Girouard J, Khalil H, Thibodeau J, Mourad W. Lipid raftdependent and -independent signaling through HLA-DR molecules. J Biol Chem. 2003 Feb 28;278(9):7099-107. Epub 2002 Dec 22. PubMed PMID: 12499388.
- 5. Swiatek-de Lange M, Rist W, Stahl HF, Weith A, Lenter MC. Comment on "MHC class II expression identifies functionally distinct human regulatory T cells". J Immunol. 2008 Mar 15;180(6):3625; author reply 3626. PubMed PMID: 18322165.
- 6. De Gassart A, Camosseto V, Thibodeau J, Ceppi M, Catalan N, Pierre P, et al. MHC class II stabilization at the surface of human dendritic cells is the result of maturationdependent MARCH I down-regulation. Proc Natl Acad Sci U S A. 2008 Mar 4;105(9):3491-6. doi: 10.1073/pnas.0708874105. Epub 2008 Feb 27. PubMed PMID: 18305173.
- 7. Ivanov A, Beers SA, Walshe CA, Honeychurch J, Alduaij W, Cox KL, et al. Monoclonal antibodies directed to CD20 and HLA-DR can elicit homotypic adhesion followed by lysosome-mediated cell death in human lymphoma and leukemia cells. J Clin Invest. 2009 Aug;119(8):2143-59. doi: 10.1172/JCl37884. Epub 2009 Jul 20. PubMed PMID: 19620786.
- 8. Kalka-Moll WM, Tzianabos AO, Bryant PW, Niemeyer M, Ploegh HL, Kasper DL. Zwitterionic polysaccharides stimulate T cells by MHC class II-dependent interactions. J Immunol. 2002 Dec 1;169(11):6149-53. PubMed PMID: 12444118.

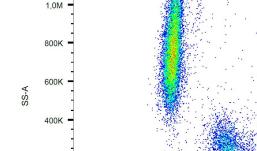
200K

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Surface staining of HLA-DR in human peripheral blood with anti-HLA-DR (L243) PerCP-Cy5.5.



103 HLA-DR PerCP-Cy5.5

**Pictures:** 

105

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104



Surface staining of HLA-DR in human peripheral blood with anti-HLA-DR (L243) APC-Cy7.

