

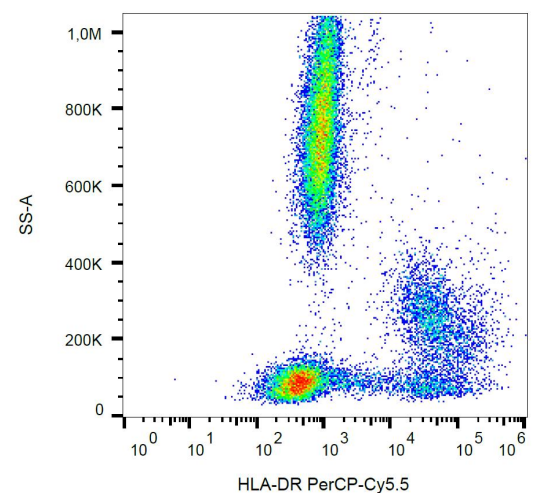
AM26708LE-N**Monoclonal Antibody to HLA Class II DR - Low Endotoxin**

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).
Isotype:	IgG2a
Clone:	L243
Immunogen:	Human B lymphocytes
Format:	State: Liquid Ig fraction Purification: Protein-A affinity chromatography (> 95% pure by SDS-PAGE) Buffer System: Azide free phosphate buffered saline (PBS), approx. pH 7.4; 0.2 µm filter sterilized Endotoxin Level: 0.01 EU/µg of the protein, as determined by the LAL test
Applications:	Flow cytometry. Immunoprecipitation. Western blot. Immunohistochemistry (paraffin sections). Immunohistochemistry (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, Primates, Canine (Dog)
Storage:	Store undiluted at 2-8°C. DO NOT FREEZE! Shelf life: one year from despatch.
General Readings:	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.

3. Muczynski KA, Ekle DM, Coder DM, Anderson SK. Normal human kidney HLA-DR-expressing 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 raft-dependent 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 maturation-dependent 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/JCI37884. Epub 2009 Jul 20. PubMed PMID: 19620786.

Pictures:

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



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

