

## OriGene Technologies, Inc.

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## AM26708AC-N Monoclonal Antibody to HLA Class II DR - APC

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

Quantity: 100 Tests

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

Clone: L243

Immunogen: Human B lymphocytes
Format: State: Liquid Ig fraction

**Buffer System:** Phosphate buffered saline (PBS)

Preservatives: 15 mM sodium azide

**Label:** APC – Conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted

for direct use.

Applications: Flow cytometry analysis of human blood cells using 10 μl reagent / 100 μl of whole

blood or 10<sup>6</sup> cells in a suspension.

The content of a vial (1 ml) is sufficient for 100 tests.

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! This products is photosensitive and should

be protected from light. 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:

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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.

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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



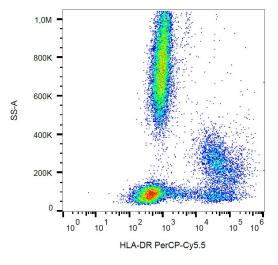
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- 6. De Gassart A, Camosseto V, Thibodeau J, Ceppi M, Catalan N, Pierre P, et al. MHC class II stabilization at the surface of human dendritic cells is the result of maturation-dependent MARCH I down-regulation. Proc Natl Acad Sci U S A. 2008 Mar 4;105(9):3491-6. 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.

