

Anti-Human HLA-DR Antibody, Clone LN3, PE



Scientists Helping Scientists™ | WWW.STEMCELL.COM

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Antibodies

Mouse monoclonal IgG2b antibody
against human, rhesus HLA-DR, PE-
conjugated

Catalog #60164PE
#60164PE.1

100 Tests
25 Tests

Product Description

The LN3 antibody reacts with the HLA-DR antigen, a major histocompatibility complex (MHC) class II receptor encoded within the human leukocyte antigen (HLA) complex on chromosome 6. HLA-DR is a heterodimeric transmembrane glycoprotein comprising non-covalently associated α (36 kDa) and β (27 kDa) subunits. MHC class II plays a central role in the presentation of antigen-derived peptides to CD4+ T cells, along with CD3/TCR and CD4. HLA-DR is primarily expressed on the surface of antigen-presenting cells, including B cells, dendritic cells, monocytes, macrophages, thymic epithelial cells, and activated T and natural killer (NK) cells. The LN3 antibody binds to an extracellular epitope that reportedly resides within the HLA-BR1 subunit of HLA-DR.

| | |
|----------------------|---|
| Target Antigen Name: | HLA-DR |
| Alternative Names: | HLA class II histocompatibility antigen, HLA-DR alpha, HLA-DRA, HLA DRA1, HLA DR1B, HLA DR3B, HLA DRB1, HLA DRB3, HLA DRB4, HLA DRB5, HLADR4B, HLADRA1, HLADRB, Major histocompatibility class II, MHC II, MHC class II, MHC class II antigen DRA, MLRW |
| Gene ID: | 3123 |
| Species Reactivity: | Human, Rhesus |
| Host Species: | Mouse |
| Clonality: | Monoclonal |
| Clone: | LN3 |
| Isotype: | IgG2b, kappa |
| Immunogen: | Human peripheral blood lymphocytes |
| Conjugate: | PE (Phycoerythrin) |

Applications

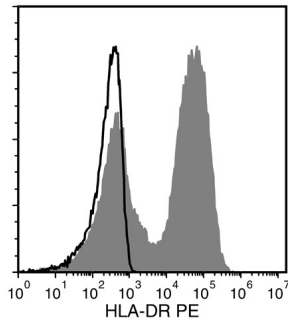
| | |
|-----------------------|---|
| Verified: | FC |
| Reported: | FA, FC |
| Special Applications: | This antibody clone has been verified for labeling dendritic cells generated from monocytes in culture using ImmunoCult™-ACF Dendritic Cell Culture Kit (Catalog #10985). |

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

| | |
|------------------------|--|
| Formulation: | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin |
| Purification: | The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody. |
| Stability and Storage: | Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com . |
| Directions for Use: | For flow cytometry, the suggested use of this antibody is 5 μ L per 1×10^6 cells in 100 μ L. It is recommended that the antibody be titrated for optimal performance for each application. |

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human HLA-DR Antibody, Clone LN3, PE (filled histogram), or Mouse IgG2b, kappa Isotype Control Antibody, Clone MPC-11, PE (Catalog #60072PE; solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

1. Iorgulescu JB et al. (2016) The limited capacity of malignant glioma-derived exosomes to suppress peripheral immune effectors. *J Neuroimmunol* 290: 103–8. (FC)
2. Leone DA et al. (2016) The phenotypic characterization of the human renal mononuclear phagocytes reveal a co-ordinated response to injury. *PLoS One* 11(3): e0151674. (FC)
3. Yawata N et al. (2016) Dynamic change in natural killer cell type in the human ocular mucosa in situ as means of immune evasion by adenovirus infection. *Mucosal Immunol* 9(1): 159–70. (FC)
4. Antonelli LR V et al. (2014) The CD14+CD16+ inflammatory monocyte subset displays increased mitochondrial activity and effector function during acute *Plasmodium vivax* malaria. *PLoS Pathog* 10(9): e1004393. (FC)
5. Pennino D et al. (2013) IL-22 suppresses IFN- γ -mediated lung inflammation in asthmatic patients. *J Allergy Clin Immunol* 131(2): 562–70. (FC)
6. Imamichi H et al. (2012) The CD8+ HLA-DR+ T cells expanded in HIV-1 infection are qualitatively identical to those from healthy controls. *Eur J Immunol* 42(10): 2608–20. (FACS, FC)
7. Dokouhaki P et al. (2010) Adoptive immunotherapy of cancer using ex vivo expanded human $\gamma\delta$ T cells: A new approach. *Cancer Lett* 297(1): 126–36. (FC)
8. Rajesh D et al. (2010) Th1 and Th17 immunocompetence in humanized NOD/SCID/IL2rgammanull mice. *Hum Immunol* 71(6): 551–9. (FC)
9. Kalyan S & Chow AW. (2009) Linking innate and adaptive immunity: human V γ 9V δ 2 T cells enhance CD40 expression and HMGB-1 secretion. *Mediators Inflamm* 2009: 819408. (FC)
10. Ristich V et al. (2005) Tolerization of dendritic cells by HLA-G. *Eur J Immunol* 35(4): 1133–42. (FC)
11. Fullen DR & Headington JT. (1998) Factor XIIIa-positive dermal dendritic cells and HLA-DR expression in radial versus vertical growth-phase melanomas. *J Cutan Pathol* 25(10): 553–8. (IHC)

PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2021 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and ImmunoCult are trademarks of STEMCELL Technologies Inc. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.