

## PE anti-human HLA-DR Antibody

<b>Catalog# / Size</b>	361605 / 25 tests 361606 / 100 tests
<b>Clone</b>	Tü36
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	MHC class II, Major Histocompatibility complex II, human leukocyte antigen, HLA
<b>Isotype</b>	Mouse IgG2b, $\kappa$
<b>Description</b>	HLA-DR is a heterodimeric cell surface glycoprotein comprised of an $\alpha$ (heavy) chain and a $\beta$ (light) chain. They are expressed on B cells, activated T cells, monocytes/macrophages, dendritic cells, and other non-professional APCs. In conjunction with the CD3/TCR complex and CD4 molecules, HLA-DR is critical for efficient peptide presentation to CD4 <sup>+</sup> T cells. Variations in the HLA gene expression are crucial to graft survival.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Baboon, Cynomolgus, Cat, Dog, Cow
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human PBL
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	Additional reported applications (of relevant formats) includes Western blotting <sup>4</sup> , immunoprecipitation <sup>4</sup> , and <i>in vitro</i> blocking <sup>5</sup> . The LEAF™ purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2 $\mu$ m filtered) is recommended for functional assays ( <a href="#">contact our custom solutions team</a> ).
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Pawelec G, <i>et al.</i> 1985. <i>Hum. Immunol.</i> 12:165. (FC)</li> <li>2. Shaw S, <i>et al.</i> 1985. <i>Hum. Immunol.</i> 12:191. (FC)</li> <li>3. Ziegler A, <i>et al.</i> 1986. <i>Immunobiology.</i> 171:77. (FC)</li> <li>4. Cebulla CM, <i>et al.</i> 2002. <i>J. Immunol.</i> 169:167. (WB, FC, IP)</li> <li>5. Khaw LT, <i>et al.</i> 2013. <i>PLOS One.</i> 8:e69521. (Block)</li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>RRID</b>	AB_2563166 (BioLegend Cat. No. 361605) AB_2563167 (BioLegend Cat. No. 361606)

## Antigen Details

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<b>Structure</b>	Ig superfamily, MHC class II, heterodimeric transmembrane protein
<b>Distribution</b>	B cells, activated T cells, monocytes/macrophages, dendritic cells, other APCs
<b>Function</b>	Antigen presentation
<b>Ligand/Receptor</b>	CD3/TCR, CD4
<b>Cell Type</b>	Antigen-presenting cells, B cells, Dendritic cells, Macrophages, Monocytes, T cells
<b>Biology Area</b>	Immunology, Innate Immunity
<b>Molecular Family</b>	MHC Antigens
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Thorsby E. 1974. <i>Transplant. Rev.</i> 18:51.</li><li>2. Qvigstad E, et al. 1984. <i>Hum. Immunol.</i> 11:207.</li><li>3. Serenius B, et al. 1984. <i>EMBO J.</i> 3:3209.</li><li>4. Ottenhoff TH, et al. 1985. <i>Hum. Immunol.</i> 13:105.</li><li>5. Strassmann G, et al. 1985. <i>Hum. Immunol.</i> 13:125.</li><li>6. Trowsdale J, et al. 1985. <i>Immunol. Rev.</i> 85:5.</li></ol>
<b>Gene ID</b>	<a href="#">3122</a> <a href="#">3123</a> <a href="#">3113</a> <a href="#">3115</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

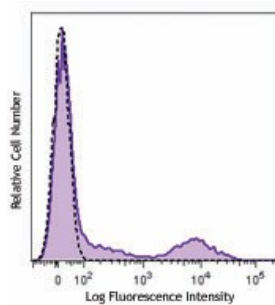
## Other Formats

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Purified anti-human HLA-DR, PerCP/Cyanine5.5 anti-human HLA-DR, APC anti-human HLA-DR, FITC anti-human HLA-DR, PE anti-human HLA-DR, PE/Cyanine7 anti-human HLA-DR, APC/Fire™ 750 anti-human HLA-DR

## Product Data

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Human peripheral blood lymphocytes were stained with HLA-DR (clone Tü36) PE (filled histogram) or mouse IgG2b, κ PE isotype control (open histogram).

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587

