

## PRODUCT INFORMATION SHEET

### Monoclonal antibodies detecting human antigens

#### Anti-HLA-DR

PURE	<span style="border: 1px solid black; padding: 0 2px;">RUO</span>	<span style="border: 1px solid black; padding: 0 2px;">REF</span>	IQP-625P	▽ 100 test
FITC	<span style="border: 1px solid black; padding: 0 2px;">RUO</span>	<span style="border: 1px solid black; padding: 0 2px;">REF</span>	IQP-625F	▽ 100 test
R-PE	<span style="border: 1px solid black; padding: 0 2px;">RUO</span>	<span style="border: 1px solid black; padding: 0 2px;">REF</span>	IQP-625R	▽ 100 test
APC	<span style="border: 1px solid black; padding: 0 2px;">RUO</span>	<span style="border: 1px solid black; padding: 0 2px;">REF</span>	IQP-625A	▽ 100 test

RUO **For Research Use Only**



#### Description

**Clone** L243

**Isotype** Murine IgG2a

**Specificity** The mouse monoclonal antibody L243 recognizes specifically HLA-DR molecules, both peptide-loaded and empty.

**Species** Human, Non-Human Primates, Canine (Dog)

**Immunogen** Human B lymphocytes

**Summary** 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).

**Applications** FC, IP, WB, IHC(P), IHC(F), ICC, FUNC. Determining optimal working dilutions by titration test.

#### Limitations

1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
4. Reagent performance can be affected by the use of anticoagulants.



#### Handling and Storage

Antibodies are supplied in phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4. Store the vials at 2-8°C. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

#### Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

#### Characterization












To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent.

**Warning** All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

## References

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.
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. 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.
4. 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.
5. 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.
6. 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.
7. De Gassart A, Camosseto V, Thibodeau J, Ceppi M, Catalan N, Pierre P, Gatti E: 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.
8. Ivanov A, Beers SA, Walshe CA, Honeychurch J, Alduaij W, Cox KL, Potter KN, Murray S, Chan CH, Klymenko T, Erenpreisa J, Glennie MJ, Illidge TM, Cragg MS: 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.

## Explanation of used symbols

	Consult instructions for use
	Catalogue number
	Sufficient for
	Caution, consult accompanying document
	Keep away from (sun)light
	Biological risks
	Temperature limitation (°C)
	For Research Use Only
	Batch code
	Use by yyyy-mm-dd
	Manufacturer

		<b>Label - tandem</b>	<b>Ex -max (nm)</b>	<b>Em -max (nm)</b>
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
C	CyQ	PE-Cy5.18	488, 532	667
A	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



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