PRODUCT INFORMATION SHEET

Monoclonal antibodies detecting human antigens

Anti-HLA-Class I

PURE	RUO	REF	IQP-622P	100 test
FITC	RUO	REF	IQP-622F	100 test
R-PE	RUO	REF	IQP-622R	100 test
Biotin	RUO	REF	IQP-622B	100 test

RUO ***For Research Use Only***

Description

Clone W6/32

Isotype Murine IgG2a

Specificity The antibody W6/32 recognises MHC Class I molecules (MHC Class Ia) that are expressed on the surface of all human nucleated cell types. The antibody W6/32 is a valuable reagent for analysing variations in HLA class I expression in different disease states e.g. liver disease, muscular dystrophy, inflammatory myopathy and other neuromuscular disorders. This antibody W6/32 is also suitable as a positive control for HLA tissue typing and crossmatching.

Species Human, Non-Human Primates, Bovine, Feline (Cat)

Immunogen Membrane of human tonsil cells

Summary HLA-class I major histocompatibility (MHC) antigens are intrinsic membrane glycoproteins expressed on nucleated cells and noncovalently associated with an invariant beta2 microglobulin. They carry foreign determinants important for immune recognition by cytotoxic T cells, thus important for anti-viral and anti-tumour defence. Human HLA-class I antigens are represented by HLA-A, HLA-B and HLA-C molecules.

Applications FC, IP, WB, IHC(F), ICC, ELISA, MC, 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. Barnstable, C. J., et al. (1978) Production of monoclonal antibodies to group A erythrocytes, HLA and other human cell surface antigens - new tools for genetic analysis. Cell. 14: 9 - 20.
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3. Neefjes, J.J. et al. (1986): A biochemical characterization of feline MHC products: unusually high expression of class II antigens on peripheral blood lymphocytes. Immunogenetics 23: 341-347.
4. Stern, P. et al. (1987): Class I-like MHC molecules expressed by baboon placental synctiotrophoblast. Journal of Immunology. 138 (4): 1088 - 1091.
5. Kievits F, Ivanyi P: Monomorphic anti-HLA monoclonal antibody (W6/32) recognizes polymorphic H-2 heavy-chain determinants exposed by association with bovine or human but not murine beta 2-microglobulin.Hum Immunol. 1987 Oct;20(2):115-26.
6. Jacobsen, C. N. et al. (1993): Reactivities of 20 anti-human monclonal antibodies with leucocytes from ten different animal species. Vet. Immunopathol. 39: 461 - 466.
7. Shields MJ, Ribaudo RK: Mapping of the monoclonal antibody W6/32: sensitivity to the amino terminus of beta2-microglobulin. Tissue Antigens 1998 May;51(5):567-70.
8. Ladasky JJ, Shum BP, Canavez F, Seuanez HN, Parham P: Residue 3 of beta2-microglobulin affects binding of class I MHC molecules by the W6/32 antibody. Immunogenetics. 1999 Apr;49(4):312-20.
9. Tran TM, Ivanyi P, Hilgert I, Brdicka T, Pla M, Breur B, Flieger M, Ivaskova E, Horejsi V: The epitope recognized by pan-HLA class I-reactive monoclonal antibody W6/32 and its relationship to unusual stability of the HLA-B27/beta2-microglobulin complex. Immunogenetics. 2001 Aug;53(6):440-6.
10. Le Discorde M, Moreau P, Sabatier P, Legeais JM, Carosella ED: Expression of HLA-G in human cornea, an immune-privileged tissue. Hum Immunol. 2003 Nov;64(11):1039-44.

Explanation of used symbols

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

		Label - tandem	**Ex -max (nm)**	**Em -max (nm)**
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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