

## PRODUCT INFORMATION SHEET

Monoclonal antibodies detecting human antigens

### Anti-HLA-Class I

PURE	<span style="border: 1px solid black; padding: 0 2px;">RUO</span>	<span style="border: 1px solid black; padding: 0 2px;">REF</span>	IQP-621P	▽ 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-621R	▽ 100 test

RUO **For Research Use Only**



#### Description

**Clone** MEM-147

**Isotype** Murine IgG1

#### Specificity

The antibody MEM-147 reacts with all human classical MHC Class I molecules in native cell-surface forms (e.g. it recognizes native HLA-A2 in cytofluorometry and immunoprecipitation but not in Western blotting). MHC Class I molecules (MHC Class Ia) are expressed on the surface of all human nucleated cell types.

The antibody MEM-147 is positive in Western blotting (non-reducing conditions) only with most HLA-B and HLA-C molecules, but not HLA-A. Reactivity is very similar to the classical antibody W6/32.

**Species** Human

**Immunogen** PHA-activated peripheral blood lymphocytes

#### 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 antiviral and anti-tumour defence. Human HLA-class I antigens are represented by HLA-A, HLA-B and HLA-C molecules.

**Applications** FC, IP, WB. 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. 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.
2. Ilangumaran S, Briol A, Hoessli DC: CD44 selectively associates with active Src family protein tyrosine kinases Lck and Fyn in glycosphingolipid-rich plasma membrane domains of human peripheral blood lymphocytes. Blood. 1998 May 15;91(10):3901-8.
3. Drbal K, Moertelmaier M, Holzhauser C, Muhammad A, Fuertbauer E, Howorka S, Hinterberger M, Stockinger H, Schütz GJ: Single-molecule microscopy reveals heterogeneous dynamics of lipid raft components upon TCR engagement. Int Immunol. 2007 May;19(5):675-84.

## 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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