

## PRODUCT INFORMATION SHEET

Monoclonal antibodies detecting human antigens

## **Anti-HLA-A2**

RUO REF ▼ 100 test R-PE IQP-619R

RUO For Research Use Only

**Description** []i

Clone **BB7.2** 

**Isotype** Murine IgG2b

The antibody BB7.2 recognizes an epitope at the C-terminus of alpha-2 helix and a turn on one of **Specificity** the underlying beta strands within the human HLA-A2 histocompatibility antigen.

**Species** Human

Immunogen HLA-A2 solubilised by papain

HLA-A2 (44 kDa) is the most frequent HLA-A allele in human ethnic populations. HLA-A, together **Summary** 

with HLA-B and HLA-C, represent human HLA class I major histocompatibility (MHC) antigens. These intrinsic membrane glycoproteins are expressed on nucleated cells and noncovalently associate 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.

**Applications** FC, IP. 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 CyO. 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.
- 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 azide free phosphate buffered saline (PBS), approx. pH 7.4; 0.2 µm filter sterilized.. 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. Parham P, Brodsky FM: Partial purification and some properties of BB7.2. A cytotoxic monoclonal antibody with specificity for HLA-A2 and a variant of HLA-A28. Hum Immunol. 1981 Dec;3(4):277-99.
- 2. Pious D, Krangel MS, Dixon LL, Parham P, Strominger JL: HLA antigen structural gene mutants selected with an allospecific monoclonal antibody. Proc Natl Acad Sci U S A. 1982 Dec;79(24):7832-6.
- 3. Krangel MS, Taketani S, Pious D, Strominger JL: HLA-A2 mutants immunoselected in vitro. Definition of residues contributing to an HLA-A2-specific serological determinant. J Exp Med. 1983 Jan 1;157(1):324-36."
- 4. Brenner MB, McLean J, Yang SY, van der Poel JJ, Pious D, Strominger JL: Clonal T lymphocyte recognition of the fine structure of the HLA-A2 molecule. J Immunol. 1985 Jul;135(1):384-90.
- 5. Santos-Aguado J, Barbosa JA, Biro PA, Strominger JL: Molecular characterization of serologic recognition sites in the human HLA-A2 molecule. J Immunol. 1988 Oct 15;141(8):2811-8."
- 6. Hogan KT, Brown SL: Localization and characterization of serologic epitopes on HLA-A2. Hum Immunol. 1992 Mar:33(3):185-92.
- 7. Nijman HW, Houbiers JG, Vierboom MP, van der Burg SH, Drijfhout JW, D'Amaro J, Kenemans P, Melief CJ, Kast WM: Identification of peptide sequences that potentially trigger HLA-A2.1-restricted cytotoxic T lymphocytes. Eur J Immunol. 1993 Jun;23(6):1215-9.
- 8. Peoples GE, Goedegebuure PS, Andrews JV, Schoof DD, Eberlein TJ: HLA-A2 presents shared tumor-associated antigens derived from endogenous proteins in ovarian cancer. J Immunol. 1993 Nov 15;151(10):5481-91.
- 9. Forero L, Zwirner NW, Fink CW, Fernández-Viña MA, Stastny P: Juvenile arthritis, HLA-Á2 and bínding of DEK oncogene-peptides. Hum Immunol. 1998 Jul;59(7):443-50.
- 10. Verdegaal EM, Huinink DB, Hoogstraten C, Marijnissen AK, Gorsira MB, Claas FH, Osanto S: Isolation of broadly reactive, tumor-specific, HLA Class-I restricted CTL from blood lymphocytes of a breast cancer patient. Hum Immunol. 1999 Dec;60(12):1195-206.
- 11. Santin AD, Bellone S, Ravaggi A, Pecorelli S, Cannon MJ, Parham GP: Induction of ovarian tumor-specific CD8+ cytotoxic T lymphocytes by acid-eluted peptide-pulsed autologous dendritic cells. Obstet Gynecol. 2000 Sep;96(3):422-30.
- 12. Liang B, Zhu L, Liang Z, Weng X, Lu X, Zhang C, Li H, Wu X: A simplified PCR-SSP method for HLA-A2 subtype in a population of Wuhan, China. Cell Mol Immunol. 2006 Dec;3(6):453-8.

## **Explanation of used symbols**

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

		Label - tandem	Ex -max (nm)	Em -max (nm)
Р	PURE	purified material	=	=
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
С	CyQ	PE-Cy5.18	488, 532	667
Α	APC	•	595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695
	,		•	



IQ Products BV

Rozenburglaan 13a 9727 DL Groningen, The Netherlands

- **4** +31 (0)50 57 57 002
- Technical marketing@iqproducts.nlOrders orders@iqproducts.nl
- <u>www.iqprodu</u>cts.nl