

PRODUCT INFORMATION SHEET

Monoclonal antibodies detecting human antigens

Anti-HLA-B7

 PURE
 RUO
 REF
 IQP-620P
 ▼ 100 test

 R-PE
 RUO
 REF
 IQP-620R
 ▼ 100 test

RUO For Research Use Only

Description

Clone BB7.1

Isotype Murine IgG1

Specificity

The mouse monoclonal antibody BB7.1 recognizes the HLA-B7 antigen. Although highly specific, it

can cross-react with HLA-B42 antigen.

Species Human, Non-Human Primates

Immunogen Papain solubilised HLA-A2, B7

Summary HLA-B7 allele of human HLA class I major histocompatibility (MHC) antigen indicates higher risk of

breast cancer and cervical cancer. Expression of HLA-B7 together with HLA-B27 is associated with increased susceptibility to spondyloarthropaties. Flow cytometry detection of these two alleles is being used to screen for patients, who suffer from inflammatory disorders affecting the sacroiliac and intervertebral joints, such as ankylosing spondylosis (AS). The HLA-B7 antigen (11 alleles) is

expressed in 22% of healthy Caucasian individuals.

Applications FC. 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.
- 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. Wang SS, Wheeler CM, Hildesheim A, Schiffman M, Herrero R, Bratti MC, Sherman ME, Alfaro M, Hutchinson ML, Morales J, Lorincz A, Burk RD, Carrington M, Erlich HA, Apple RJ: Human leukocyte antigen class I and II alleles and risk of cervical neoplasia: results from a population-based study in Costa Rica. J Infect Dis. 2001 Nov 15;184(10):1310-4.
- 2. Grunewald J, Eklund A, Olerup O: Human leukocyte antigen class I alleles and the disease course in sarcoidosis patients. Am J Respir Crit Care Med. 2004 Mar 15;169(6):696-702.
- 3. Bhattacharya P, Sengupta S: Predisposition to HPV16/18-related cervical cancer because of proline homozygosity at codon 72 of p53 among Indian women is influenced by HLA-B*07 and homozygosity of HLA-DQB1*03. Tissue Antigens. 2007 Oct;70(4):283-93.
- 4. Harjacek M, Margetić T, Kerhin-Brkljacić V, Martinez N, Grubić Z: HLA-B*27/HLA-B*07 in combination with D6S273-134 allele is associated with increased susceptibility to juvenile spondyloarthropathies. Clin Exp Rheumatol. 2008 May-Jun;26(3):498-504.
- 5. Cortez-Gonzalez X, Sidney J, Adotevi O, Sette A, Millard F, Lemonnier F, Langlade-Demoyen P, Zanetti M: Immunogenic HLA-B7-restricted peptides of hTRT. Int Immunol. 2006 Dec;18(12):1707-18.
- 6. Hofmann S, Glückmann M, Kausche S, Schmidt A, Corvey C, Lichtenfels R, Huber C, Albrecht C, Karas M, Herr W: Rapid and sensitive identification of major histocompatibility complex class I-associated tumor peptides by Nano-LC MALDI MS/MS. Mol Cell Proteomics. 2005 Dec;4(12):1888-97.
- 7. Lo Monaco E, Sibilio L, Melucci E, Tremante E, Suchànek M, Horejsi V, Martayan A, Giacomini P: HLA-E: strong association with beta2-microglobulin and surface expression in the absence of HLA class I signal sequence-derived peptides. Immunol. 2008 Oct 15;181(8):5442-50.
- 8. de la Salle H, Saulquin X, Mansour I, Klayme S, Fricker D, Zimmer J, Cazenave JP, Hanau D, Bonneville M, Houssaint E, Lefranc G, Naman R: Asymptomatic deficiency in the peptide transporter associated to antigen processing (TAP). Clin Exp Immunol. 2002 Jun;128(3):525-31.
- 9. Storkus WJ, Alexander J, Payne JA, Dawson JR, Cresswell P: Reversal of natural killing susceptibility in target cells expressing transfected class I HLA genes. Proc Natl Acad Sci U S A. 1989 Apr;86(7):2361-4.
- 10. Nabel GJ, Nabel EG, Yang ZY, Fox BA, Plautz GE, Gao X, Huang L, Shu S, Gordon D, Chang AE: Direct gene transfer with DNA-liposome complexes in melanoma: expression, biologic activity, and lack of toxicity in humans. Proc Natl Acad Sci U S A. 1993 Dec 1;90(23):11307-11.

Explanation of used symbols

Ţij_	Consult instructions for use
REF	Catalogue number
₹ ·	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
7	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
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.igproducts.nl</u>