

MHC DEXTRAMER® VIRUS PANEL

DETECTION OF VIRUS-SPECIFIC IMMUNITY

Activation of CD8+ T cells specific for persistent and acute viral infection is central in human anti-viral immunity. Virus-specific CD8+ T cells can be detected in the blood of infected individuals. The MHC Dextramer® Virus Panel provides reagents for detection, quantification and isolation of virus-specific T cells for 4 important general and opportunistic viruses. The panel enables detection of CMV-, EBV-, influenza- and BK virus-specific CD8+ T cells.

The MHC Dextramer® Virus Panel consists of Dextramer® reagents displaying epitopes from immunodominant antigens from CMV, EBV, influenza and BK-virus. The Dextramer® can be used individually or in combination for detection and/or isolation of virus-specific T cells. The MHC Dextramer® Virus Panel can be used to monitor virus-specific T cell responses in a variety of research- and clinical settings:

- Monitoring virus immune status in immune-compromised individuals
- Monitoring virus immune status following transplantation
- Testing of virus-specific vaccines
- Profiling of virus-specific T cell responses

CONTENT

The MHC Dextramer® Virus Panel comprises 4 virus-specific Dextramer® reagents and 1 negative control:

Dextramer®	Virus	# Tests
HLA-A*0201 / NLVPMVATV	CMV	50
HLA-A*0201 / GLCTLVAML	EBV	50
HLA-A*0201 / GILGFVFTL	Influenza	50
HLA-A*0201 / LLMWEAVTV	BK virus	50
HLA-A*0201 / Negative Control	Neg. control	50

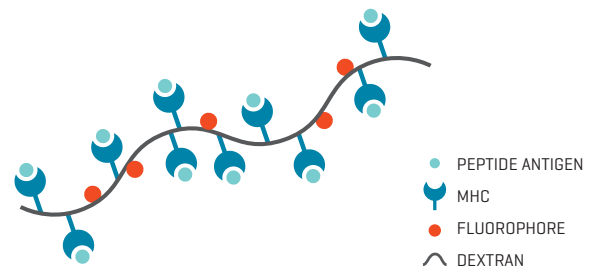
The MHC Dextramer® Virus Panel comes as a set with either PE, APC or FITC label.

The MHC Dextramer® Virus Panel is for research use only.

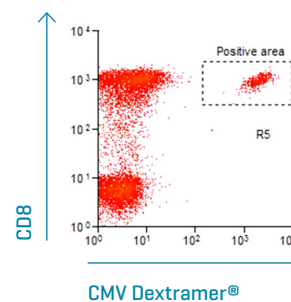
RELATED PRODUCTS

The Dextramers in MHC Dextramer® Virus Panel are also available as single reagents. Immudex offers additional virus Dextramer® reagents not included in the panel. These display other epitopes from the same viruses, or epitopes restricted by other alleles. For further information, please see www.immudex.com

MHC DEXTRAMER®



FLOW CYTOMETRY ANALYSIS



Flow cytometry analysis using the CMV Dextramer®.

POPULAR VIRUS DEXTRAMER®

Allele	Peptide	Antigen	Virus
A*0201	NLVPMVATV	pp65	CMV
H-2 Db	KAVYNFATC	gp33-84	LCMV
A*0201	SLYNTVATL	gag	HIV
A*0201	GILGFVFTL	mp	Influenza
H-2 Db	ASNENMETM	np366-374	Influenza
H-2 Kb	TSYKFESV	B8 pp	Vaccinia
A*0201	GLCTLVAML	BMLF1	EBV
A*0201	FLPSDFFPSV	cp18-27	HBV
A*2402	QYDPVAALF	pp65	CMV
H-2 Db	FQPQNGQFI	np396-404	LCMV
A*0201	CINGVCWTV	pp	HCV
A*0201	CLGGLTMV	LMP-2 426-434	EBV
A*0201	FLLTRILT	sp20-28	HBV
H-2 Ld	SPSYVYHQF	env	MLV
H-2 Kd	IYSTVASSL	HA	Influenza

REFERENCES

- Ikegame, K., R. Kato, T. Fujioka, M. Okada, K. Kaida, S. Ishii, S. Yoshihara, T. Inoue, K. Taniguchi, H. Tamaki, T. Soma, and H. Ogawa. **Detection of donor-derived CMV-specific T cells in cerebrospinal fluid in a case of CMV meningoencephalitis after cord blood stem cell transplantation.** International journal of hematology, 2013, 97: 287-90.
- Hadrup, S. R., J. Strindhall, T. Køllgaard, T. Seremet, B. Johansson, G. Pawelec, P. thor Straten, and Wikby, A. **Longitudinal studies of clonally expanded CD8 T cells reveal a repertoire shrinkage predicting mortality and an increased number of dysfunctional cytomegalovirus-specific T cells in the very elderly.** Journal of immunology [Baltimore, Md. : 1950], 2006, 176: 2645-53.
- Cwynarski K, Ainsworth J, Cobbold M, Wagner S, Mahendra P, Apperley J, et al. **Direct visualization of cytomegalovirus-specific T-cell reconstitution after allogeneic stem cell transplantation.** Blood, 2001, 97[5]:1232-40.
- Borchers S, Bremm M, Lehrnbecher T, Dammann E, Pabst B, Wölk B, Esser R, Yildiz M, Eder M, Stadler M, Bader P, Martin H, Jarisch A, Schneider G, Klingebiel T, Ganser A, Weissinger EM, Koehl U. **Sequential anti-cytomegalovirus response monitoring may allow prediction of cytomegalovirus reactivation after allogeneic stem cell transplantation.** PLoS One, 2012, 7[12]
- Moal V, Zandotti C, Colson P. **Emerging viral diseases in kidney transplant recipients.** Rev Med Virol. 2013 Jan;23[1]:50-69.
- Setti, M., D. Fenoglio, F. Ansaldo, G. Filaci, S. Bacilieri, L. Sticchi, A. Ferrera, F. Indiveri, and M. Ghio. **Flu vaccination with a virosomal vaccine does not affect clinical course and immunological parameters in scleroderma patients.** Vaccine, 2009, 27: 3367-72.