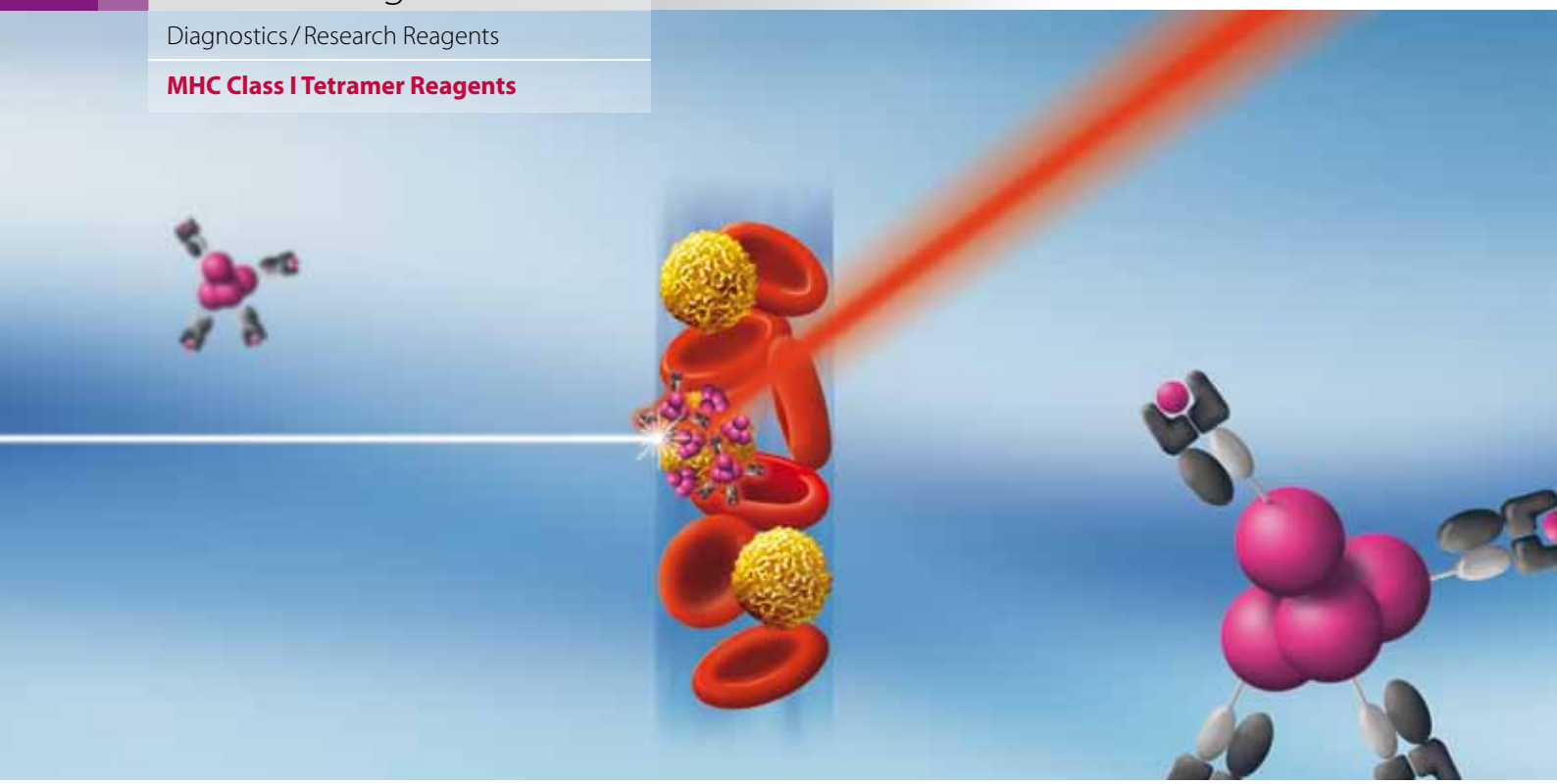
GLYCOTOPE Biotechnology

Immunodiagnostics

Diagnostics / Research Reagents

MHC Class I Tetramer Reagents



Monitoring T cells with Tetramers

The development of MHC peptide tetramers has allowed direct insights into the frequency, distribution and dynamics of the cellular immune response. Monitoring T cell responses is now possible in a range of infectious diseases such as Influenza, Hepatitis B (HBV) and C (HCV), HIV, Cytomegalo (CMV) and Epstein Barr Virus (EBV) as well as in cancer research, transplantation immunology and vaccine development. The multivalent nature of the tetramer increases the avidity and results in stable binding of tetramers to the corresponding antigen-specific T cells.

CD8+ T cells recognize virally infected cells or tumor cells and use cytotoxic molecules to kill the target cell. T cells that are stimulated by antigen are developmentally programmed to divide at least 7 - 10 times and to differentiate into effector cytotoxic T lymphocytes and long lived, functional memory CD8+ T cells. This polyclonal expansion of antigen-specific T cells can be monitored with tetramers. The number of tetramer-positive and CD8-positive T cells is determined by flow cytometry.

CE-Certified CMV-Kit

- Specific and sensitive detection of CMV-specific T cells with Tetramers
- Direct analysis in whole blood
- Combination of well characterized CMV peptides and HLA-types (A1, A2, B7, B8)

On Request We Manufacture

- Tetramers with peptides of your choice
- Biotinylated monomers
- Synthetic peptides
- PE-or APC-labeled Tetramers

Our Core Competencies:

We offer a range of tetramers to monitor T cell responses in

- Infectious dieases
- Cancer Research
- Vaccine development
- Transplantation immunology

For more information please contact us

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