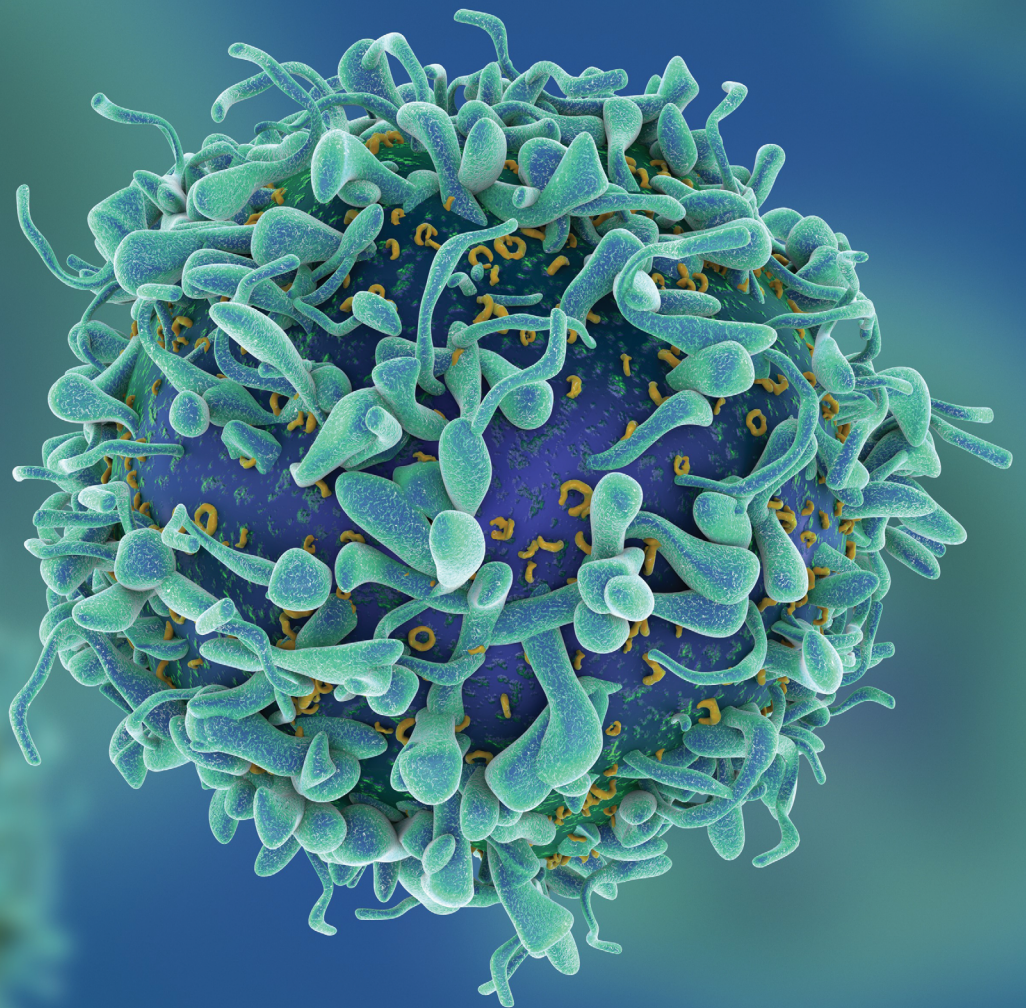
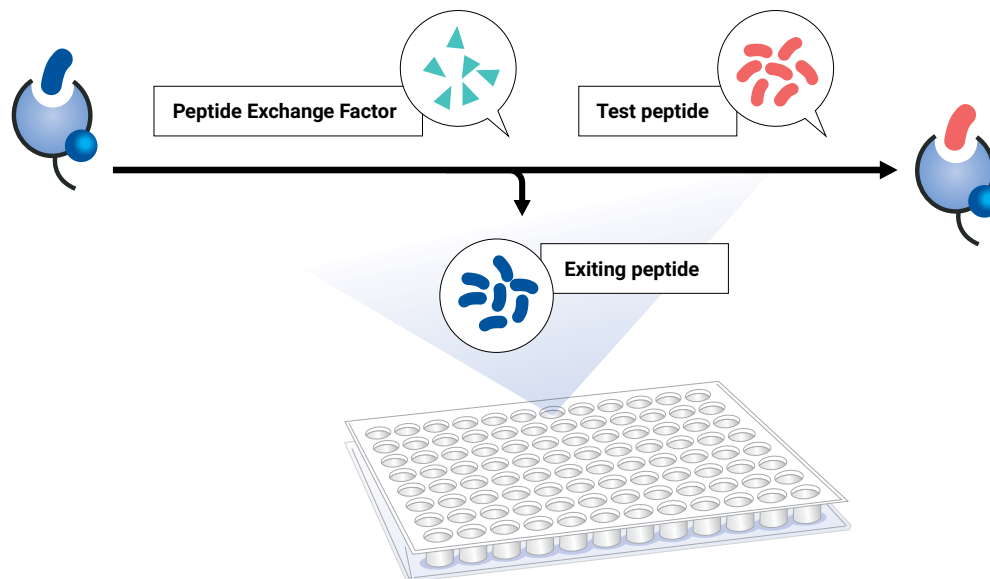


MBLI offers novel solutions for screening MHC binding peptides and creating custom MHC tetramers





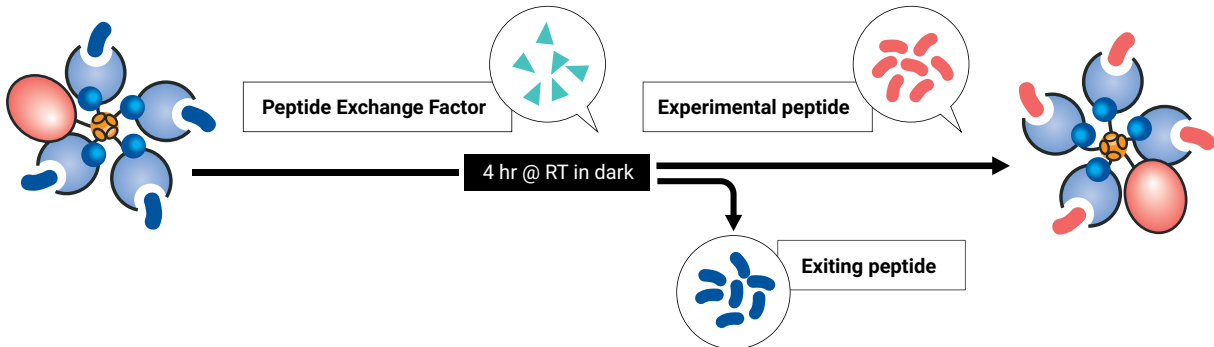
Determine Peptide-MHC Monomer Affinity

- Quantitate peptide-MHC binding affinities for further downstream applications
- Validate *in silico* MHC peptide binding predictions
- High throughput screening assay with same day results

QuickSwitch™ Peptide Screening Kit is a fresh, new technology that allows for analysis of many peptides in an easy and ready to use high throughput format. There is no need for optimizing prior to use. One 96 well plate allows for accurate peptide-MHC binding affinity results that can be gathered in one day.

- High throughput MHC monomer, peptide screening in a 96 well plate assay
- Evaluate immune potentiators/vaccine efficacy or disease progression
- Neo-epitope screening for further downstream T cell recognition and activation assays
- Determine peptide affinity for specific MHC Class I alleles
- Target discovery of new peptides for immunotherapy and drug discovery

MBL International's QuickSwitch™ Peptide Screening kit complements *in silico* MHC peptide binding predictions tools as theoretical peptide MHC binding affinities generated with algorithms have to be validated. This high throughput and fast assay mimics the natural process of an immune response by identifying which epitopes in a protein can bind to the various MHC molecules and are therefore potentially immunogenic. As the Peptide Screening assay does not rely on peptide binding to live cells (such as in the T2 stabilization assay), it provides reliable and repeatable results. When overlapping peptides of a given protein sequence are tested the Peptide Screening assay routinely reveals peptide binders that were not predicted with algorithms, which therefore helps increasing the panoply of crucial peptides for creation of vaccines, cloning of T cell receptors or development of TCR like antibodies.



Peptide exchange to generate new specificity tetramers	Peptide exchange quantitation assay	Flow analysis of peptide exchange	Cell staining with new specificity tetramers	Flow analysis
4 hours	1.5 hours	45 min	45 min	1.5 hours
8 hours				
Hands on time				
15 min	20 min	20 min	15 min	30 min

Determine MHC Tetramer functionality

- Determine MHC Tetramer functionality with your peptide of interest
- Create your own custom tetramer
- Identify antigen-specific T cells to your target of interest
- Available in PE, APC, or BV421
- No UV required

Rapid, high-quality creation of custom Class I tetramers is now a reality! Create new specificity tetramers in just a few hours with QuickSwitch™ Custom Tetramers Kit, a proprietary technology for exchanging peptides on an MHC tetramer. The QuickSwitch™ Quant Tetramer Kit can quantify the exchange with the new peptide for epitope discovery and for verification that the resulting new specificity tetramer is suitable for cell staining. This kit is optimized for 10 peptide exchanges and multiple tests per resulting tetramer.

**Peptide exchange,
quantification, cell staining,
and flow cytometry can all
be performed in one day!**

Products offered:

QuickSwitch™ Custom Tetramer Kits

Code Number	Product Name	Conjugate	Quantification Included
TB-7300-K1	QuickSwitch™ Quant HLA-A*02:01 Tetramer Kit	PE	Yes
TB-7300-K2	QuickSwitch™ Quant HLA-A*02:01 Tetramer Kit	APC	Yes
TB-7300-K4	QuickSwitch™ Quant HLA-A*02:01 Tetramer Kit	BV421	Yes
TB-7302-K1	QuickSwitch™ Quant HLA-A*24:02 Tetramer Kit	PE	Yes
TB-7302-K2	QuickSwitch™ Quant HLA-A*24:02 Tetramer Kit	APC	Yes
TB-7302-K4	QuickSwitch™ Quant HLA-A*24:02 Tetramer Kit	BV421	Yes
TB-7304-K1	QuickSwitch™ Quant HLA-A*11:01 Tetramer Kit	PE	Yes
TB-7304-K2	QuickSwitch™ Quant HLA-A*11:01 Tetramer Kit	APC	Yes
TB-7304-K4	QuickSwitch™ Quant HLA-A*11:01 Tetramer Kit	BV421	Yes
TB-7400-K1	QuickSwitch™ Quant H-2 Kb Tetramer Kit	PE	Yes
TB-7400-K2	QuickSwitch™ Quant H-2 Kb Tetramer Kit	APC	Yes
TB-7400-K4	QuickSwitch™ Quant H-2 Kb Tetramer Kit	BV421	Yes

QuickSwitch™ Peptide Screening Kits

TB-7300-KM	QuickSwitch™ HLA-A*02:01 Peptide Screening Kit	N/A	Yes

**Be sure to check our website
for new alleles offered!**