Miltenyi Biotec

MHC MACSimer H-2Kb FleX Kit, mouse, PE

50 tests	130-133-909
100 tests	130-133-913

Contents

1. Description
   - 1.1 Background information
   - 1.2 Applications
   - 1.3 Reagent and instrument requirements
2. Protocol

1. Description

This product is for research use only.

Components	**One kit for 50 tests contains:**
	1× 150 µL MHC MACSimer H-2Kb FleX Reagent, mouse, PE (100 pmol)
	1× 100 µL MHC MACSimer H-2Kb FleX Loading Buffer
	One kit for 100 tests contains:
	2× 150 µL MHC MACSimer H-2Kb FleX Reagent, mouse, PE (100 pmol)
	2× 100 µL MHC MACSimer H-2Kb FleX Loading Buffer
Class	MHC Class I
Allele	H-2Kb
Antigen	custom
Peptide sequence	custom
Species reactivity	mouse
Release feature	yes
Product format	MHC MACSimer FleX Reagents are supplied in buffer containing stabilizer and 0.05% sodium azide. MHC MACSimer FleX Loading Buffer contains 0.05% sodium azide.
Storage	Store protected from light at +2 to +8 °C. Do not freeze. The expiration date is indicated on the vial label.

1.1 Background information

MHC MACSimer FleX Kits have been designed for the highly flexible analysis of antigen-specific T cells. The antigenic peptide of interest, such as a disease-associated peptide, is loaded onto the provided MHC MACSimer FleX Reagent for subsequent analysis of antigen-specific T cells. With the kit, a single epitope of interest can be easily analyzed in multiple samples. Alternatively, a large number of different (potential) epitopes can be screened in parallel. For sequential multi-sorting or further downstream applications, MHC MACSimers of certain allelic variants can be released from the antigen-specific T cells after staining using REAlease® Technology.

The MHC MACSimer FleX Kits allow maximum flexibility for various applications, like neoantigen discovery, screening of potential cancer, autoimmune or pathogen-related T cell epitopes, as well as monitoring of antigen-specific T cell responses.

1.2 Applications

- Detection and analysis of antigen-specific T cells by flow cytometry
- Sorting and enrichment of antigen-specific T cells by flow sorting or MACS® Technology (magnetic enrichment using Anti-PE MicroBeads)

1.3 Reagent and instrument requirements

- Flow cytometer equipped with a red (640 nm), a blue (488 nm), and a violet (405 nm) laser, e.g., MACSQuant® Analyzer 10 (# 130-096-343) or MACSQuant Analyzer 16 (# 130-109-803)
- (Optional) MHC MACSimer H-2Kb, Control, mouse, PE (# 130-134-641, # 130-134-670)
- (Optional) REAlease Support Kit (# 130-120-675)
- (Optional) Cell sorter equipped with a red (640 nm), a blue (488 nm), and a violet (405 nm) laser, e.g., MACSQuant Tyto® (# 130-103-931)
- (Optional) Anti-PE MicroBeads (# 130-048-801) or Anti-PE MicroBeads UltraPure (# 130-105-639)

2. Protocol

▲ The detailed protocol and an exemplary MHC MACSimer staining data set are available at **www.miltenyibiotec.com/MHC-class-1-MACSimer-loading-and-staining.html**.

	50 tests	100 tests
Number of loading reactions	5 with 50 µL each	10 with 50 µL each
Number of staining reactions	≥50 with 10^6 cells each	≥100 with 10^6 cells each

Table 1: Kit capacities for loading and staining reactions.

Refer to **www.miltenyibiotec.com** for all data sheets and protocols. Miltenyi Biotec provides technical support worldwide. Visit www.miltenyibiotec.com for local Miltenyi Biotec Technical Support contact information.

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