Miltenyi Biotec

MHC MACSimer B*4001 Control, human, PE

50 tests	130-139-186
150 tests	130-139-187

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1. Description

This product is for research use only.

Components	**50 tests:** 1× 150 µL MHC MACSimer B*4001 Control, human, PE (100 pmol) **150 tests:** 3× 150 µL MHC MACSimer B*4001 Control, human, PE (100 pmol)
Class	MHC Class I
Allele	B*4001 ▲ **Note:** The allele number is based on the human leukocyte antigen (HLA) nomenclature to designate a specific allele at a given HLA locus.
Antigen	Control
Peptide sequence	Control
Species reactivity	human
Release feature	yes
Product format	Reagents are supplied in buffer containing stabilizer and 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 Control Reagents have been developed for the reliable exclusion of unspecific background signals during the detection and isolation of antigen-specific T cells using MHC MACSimers via flow cytometry. MHC MACSimer Control Reagents are offered in various human and murine MHC allele variants to match our MHC product portfolio. They are recommended to be used as a negative staining control when analyzing antigen-specific T cells using Peptide-loaded MHC MACSimers or MHC MACSimer FleX Kits, e.g., in the context of T cell receptor (TCR) epitope screening, TCR-T cell therapy development, or immune response monitoring.

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) 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/peptide-loaded-MHC-class-1-MACSimer-staining.html.**

	50 tests	150 tests
Number of staining reactions	≥50 with 10^6 cells each	≥150 with 10^6 cells each

Table 1: Reagent capacities for 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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