

# MHC MACSimer A\*1101 Control, human, PE

30 tests 130-136-357 90 tests 130-136-358

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# 1. Description

This product is for research use only.

Components 30 tests:

1× 150 μL MHC MACSimer A\*1101 Control,

human, PE (100 pmol)

90 tests:

3× 150 μL MHC MACSimer A\*1101 Control,

human, PE (100 pmol)

Class I MHC Class I

Allele A\*1101

▲ 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

Peptide-loaded MHC MACSimers have been developed for the accurate detection, analysis, and isolation of antigen-specific T cells from different origins, ranging from peripheral blood mononuclear cells (PBMCs) to dissociated organs and whole blood samples. MHC MACSimers are offered in various peptide-MHC allele combinations and cover the most important antigens associated with cancer, infection, and autoimmune diseases. MHC MACSimers are optimized for minimal hands-on time protocols. They feature superior brightness, enabling reliable identification of even rare T cell populations via their T cell receptor complex (TCR). 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.

## 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.

	30 tests	90 tests
Number of staining reactions	≥30 with 10 <sup>6</sup> cells each	≥90 with 10 <sup>6</sup> 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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