MHC MACSimer DRB1*0401 Control, human, PE

50 tests 130-136-527
150 tests 130-136-528

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	**50 tests:** 1× 150 µL MHC MACSimer DRB1*0401 Control, human, PE (100 pmol) **150 tests:** 3× 150 µL MHC MACSimer DRB1*0401 Control, human, PE (100 pmol)
Class	MHC Class II
Allele	DRB1*0401 [DR4, DR4a, Dw4] ▲ **Note:** The allele number is based on the human leukocyte antigen (HLA) nomenclature of the MHC class II DR beta chain to designate a specific allele at a given HLA locus. DR beta chain is always pairing with DRA*0101 alpha chain.
Antigen	Control
Peptide sequence	Control
Species reactivity	human
Product format	Reagents are supplied in buffer containing stabilizer and 0.05% sodium azide.
Storage	Store protected from light at –80 °C. It is recommended to store in aliquots. Avoid more than 5 freeze thaw cycles. 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 can 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) 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-2-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.

Miltenyi Biotec B.V. & Co. KG
Friedrich-Ebert-Straße 68, 51429 Bergisch Gladbach, Germany
Phone +49 2204 8306-0, Fax +49 2204 85197
macsde@miltenyi.com
www.miltenyibiotec.com

140-007-362.01

Legal notices

Limited product warranty

Miltenyi Biotec B.V. & Co. KG and/or its affiliate(s) warrant this product to be free from material defects in workmanship and materials and to conform substantially with Miltenyi Biotec's published specifications for the product at the time of order, under normal use and conditions in accordance with its applicable documentation, for a period beginning on the date of delivery of the product by Miltenyi Biotec or its authorized distributor and ending on the expiration date of the product's applicable shelf life stated on the product label, packaging or documentation (as applicable) or, in the absence thereof, ONE (1) YEAR from date of delivery ("Product Warranty"). Miltenyi Biotec's Product Warranty is provided subject to the warranty terms as set forth in Miltenyi Biotec's General Terms and Conditions for the Sale of Products and Services available on Miltenyi Biotec's website at www.miltenyibiotec.com, as in effect at the time of order ("Product Warranty"). Additional terms may apply. BY USE OF THIS PRODUCT, THE CUSTOMER AGREES TO BE BOUND BY THESE TERMS.

THE CUSTOMER IS SOLELY RESPONSIBLE FOR DETERMINING IF A PRODUCT IS SUITABLE FOR CUSTOMER'S PARTICULAR PURPOSE AND APPLICATION METHODS.

Technical information

The technical information, data, protocols, and other statements provided by Miltenyi Biotec in this document are based on information, tests, or experience which Miltenyi Biotec believes to be reliable, but the accuracy or completeness of such information is not guaranteed. Such technical information and data are intended for persons with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. Miltenyi Biotec shall not be liable for any technical or editorial errors or omissions contained herein.

All information and specifications are subject to change without prior notice. Please contact Miltenyi Biotec Technical Support or visit www.miltenyibiotec.com for the most up-to-date information on Miltenyi Biotec products.

Licenses

This product and/or its use may be covered by one or more pending or issued patents and/or may have certain limitations. Certain uses may be excluded by separate terms and conditions. Please contact your local Miltenyi Biotec representative or visit Miltenyi Biotec's website at www.miltenyibiotec.com for more information.

The purchase of this product conveys to the customer the non-transferable right to use the purchased amount of the product in research conducted by the customer (whether the customer is an academic or for-profit entity). This product may not be further sold. Additional terms and conditions (including the terms of a Limited Use Label License) may apply.

CUSTOMER'S USE OF THIS PRODUCT MAY REQUIRE ADDITIONAL LICENSES DEPENDING ON THE SPECIFIC APPLICATION. THE CUSTOMER IS SOLELY RESPONSIBLE FOR DETERMINING FOR ITSELF WHETHER IT HAS ALL APPROPRIATE LICENSES IN PLACE. Miltenyi Biotec provides no warranty that customer's use of this product does not and will not infringe intellectual property rights owned by a third party. BY USE OF THIS PRODUCT, THE CUSTOMER AGREES TO BE BOUND BY THESE TERMS.

Trademarks

MACS, MACSQuant, the Miltenyi Biotec logo, REAlease, and Tyto, and Vio are registered trademarks or trademarks of Miltenyi Biotec B.V. & Co. KG and/or its affiliates in various countries worldwide. All other trademarks mentioned in this publication are the property of their respective owners and are used for identification purposes only.

Copyright © 2025 Miltenyi Biotec and/or its affiliates. All rights reserved.