7-AAD Staining Solution

Order no. 130-111-568

Contents

1. Description

This product is for research use only.

Components	1 mL 7-AAD Staining Solution:
Capacity	For 10^8 total cells, up to 100 tests.
Product format	The ready-to-use 7-AAD Staining Solution is supplied in phosphate-buffered saline, pH 7.2, at a concentration of 52.5 µg/mL.
Storage	Store protected from light at 2–8 °C. Do not freeze. The expiration date is indicated on the vial label.

1.1 Background information

7-AAD (7-amino-actinomycin D) is a fluorescent dye that intercalates into double-stranded DNA (GC rich regions). It is excluded from viable cells, but can penetrate cell membranes of dead or dying cells. Therefore, it can be used instead of propidium iodide (PI) for the evaluation of cell death and apoptosis.
The fluorescence emission maximum for 7-AAD is at 647 nm. When excited at 488 nm, 7-AAD is detected in the red fluorescence channel commonly used for R-phycoerythrin (PE)-Cy®5 tandem dye detection, with minimal spectral overlap into the yellow fluorescence channel commonly used for PE detection.

1.2 Applications

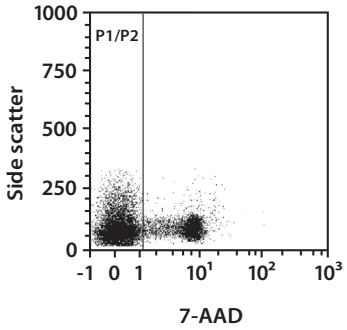
- Exclusion of dead cells from flow cytometric analysis.

1.3 Recommended dilution

It is recommended to use 7-AAD Staining Solution at a final concentration of 0.525 µg/mL. Since application vary, each investigator should titrate the reagent to obtain optimal results.
For 10^6 cells in 1 mL buffer add 10 µL of 7-AAD Staining Solution and incubate for 5 minutes in the dark at room temperature before analysis.

2. Example of cell staining with the 7-AAD Staining Solution

10^6 human peripheral blood mononuclear cells (PBMCs), 8 days old, were stained with 7-AAD Staining Solution and analyzed by flow cytometry using the MACSQuant® Analyzer 10. Cell debris was excluded from the analysis based on scatter signals. Dead cells are positive for 7-AAD and thus can be excluded from analysis. Viable cells belong to the P2 population.



3. Reference

1. Schmid, I. *et al.* (1992) Dead cell discrimination with 7-amino-actinomycin D in combination with dual color immunofluorescence in single laser flow cytometry. Cytometry 13 (2): 204–208.

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

140-005-082.02

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

MACSQuant and the Miltenyi Biotec logo are registered trademarks or trademarks of Miltenyi Biotec and/or its affiliates in various countries worldwide. All other trademarks mentioned in this document are the property of their respective owners and are used for identification purposes only.

Cy is a registered trademark of GE Healthcare UK Limited.