Macrophage Detachment Solution

PromoCell®

Instruction Manual

Product	Size	Catalog Number
Macrophage Detachment Solution	250 ml	C-41330

Product Description

Macrophages are strongly adherent and are not effectively dislodged from culture surfaces by standard enzymatic cell dissociation reagents. Indeed, these cells are highly sensitive to improper dissociation procedures. Our Macrophage Detachment Solution is chemically defined and non-enzymatic. It was especially designed for the gentle release of adherent macrophages and guarantees the best possible cell viability, even after prolonged exposure times. Unlike enzyme-based solutions, our Macrophage Detachment Solution does not alter cell surface proteins and neutralization is not necessary.

Note: The Macrophage Detachment Solution is not suitable for the dissociation of other adherent cell types.

Instructions to use

1. Aspirate and discard the medium from the adherent macrophages.
2. Wash the cells twice with PBS w/o Ca^{++}/Mg^{++} (C-40232).
3. Immediately add 250–300 µl/cm^2 of cold (2–8°C) Macrophage Detachment Solution to the cells and seal the tissue culture vessel.
4. Incubate cells for 40 minutes at 2–8°C.

Firmly tap the tissue culture vessel to facilitate cell detachment and check the detachment progress using a microscope. If necessary, incubate for another 20 minutes at room temperature to enforce cell release from the culture surface.

Note: The detachment efficiency varies with the type of macrophage (polarization/activation factors used) as well as with the tissue culture plastic used.

5. Make sure that most of the cells have already detached or are only loosely adhered to the surface of the tissue culture vessel (cells appear rounded up with bright shining borders). Only then use a cell scraper to dislodge the remaining macrophages.
6. Collect the harvested macrophages in centrifugation tubes and dilute 1:1 with PBS/2 mM EDTA/0.1% HSA.
7. Centrifuge cells for 15 minutes at 350 x g at room temperature.
8. Apply two washes of PBS/2 mM EDTA/0.1% HSA to the cells and count them.
9. The macrophages are now ready to be used for your experiments.

Note: The percentage of attaching cells after re-seeding depends on the overall health status of the macrophages before detachment and the successful performance of the detachment process itself. Thus, some degree of variation is unavoidable.

Storage and Stability

Store at 2–8°C immediately after arrival. If stored properly, the product is stable until the expiry date stated on the label.

Quality Control

All lots of PromoCell Mononuclear Cell Medium are subjected to comprehensive quality control tests using primary human mononuclear cells from cord blood and adult peripheral blood. Each lot is checked for unaltered short-term maintenance of highly viable mononuclear cells. Approved in-house lots of media are used as a reference.

In addition, all lots of media have been tested for the absence of microbial contaminants (fungi, bacteria, mycoplasma).

Intended Use

The products are for *in vitro* research use only and not for diagnostic or therapeutic procedures. For safety precautions please see appropriate MSDS.

If you require special media modifications, we offer a custom media service starting at 10 bottles per order.
Contact us at info@promocell.com to find out more.

PromoCell GmbH
Sickingenstr. 63/65
69126 Heidelberg
Germany

info@promocell.com
www.promocell.com

USA/Canada
Phone: 1 – 866 – 251 – 2860 (toll free)
Fax: 1 – 866 – 827 – 9219 (toll free)

Deutschland
Telefon: 0800 – 776 66 23 (gebührenfrei)
Fax: 0800 – 100 83 06 (gebührenfrei)

France
Téléphone: 0800 – 90 93 32 (ligne verte)
Téléfax: 0800 – 90 27 36 (ligne verte)

United Kingdom
Phone: 0800 96 03 33 (toll free)
Fax: 0800 169 85 54 (toll free)

Other Countries
Phone: +49 6221 – 649 34 0
Fax: +49 6221 – 649 34 40

11/2021