

Macrophage Detachment Solution DXF

PromoCell

Instruction Manual

Product	Size	Catalog Number
Macrophage Detachment Solution DXF	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. The PromoCell Macrophage Detachment Solution DXF is non-enzymatic, chemically defined and animal component-free. 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 the PromoCell Macrophage Detachment Solution DXF does not alter cell surface proteins and neutralization is not necessary.

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

Instructions for Use

1. Aspirate and discard the medium from the adherent macrophages.
2. Wash the cells twice with endotoxin-free PBS w/o $\text{Ca}^{2+}/\text{Mg}^{2+}$ (C-40242).
3. Immediately add 250 - 300 $\mu\text{l}/\text{cm}^2$ of cold (2 - 8°C) Macrophage Detachment

Solution DXF to the cells and seal the tissue culture vessel.

4. Incubate cells for 40 min 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 min 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 over-

all 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 Macrophage Detachment Solution DXF are subjected to comprehensive quality control tests. Each lot is routinely tested for biological function and absence of cytotoxicity. Approved in-house lots are used as a reference.

In addition, all lots 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.