Animal Component-Free Cell Dissociation Kit

Dissociation kit for human stem and progenitor cells

Catalog #05426 1 Kit

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Product Description

Animal Component-Free Cell Dissociation Kit is optimized for dissociation and passaging of human stem and progenitor cells cultured in various media formulations.

Product Information

The following components are sold as a complete kit (Catalog #05426) and are not available for individual sale.

COMPONENT NAME	COMPONENT #	SIZE	STORAGE	SHELF LIFE
ACF Enzymatic Dissociation Solution	05427	250 mL	Store at -20°C.	Stable until expiry date (EXP) on label.
ACF Enzyme Inhibition Solution	05428	250 mL	Store at -20°C.	Stable until expiry date (EXP) on label.

Directions for Use

For dissociation and passaging of human mesenchymal stem and progenitor cells (MSCs), refer to the protocol below. For other cell types, use as directed in the Product Information Sheet (PIS) for the applicable STEMCELL product.

NOTE: For instructions on culturing human MSCs using serum- and animal component-free MesenCult™-ACF Medium or serum- and xeno-free MesenCult™-XF Medium, refer to the PIS or Technical Manual (Document #28066 or #29184, respectively) available at www.stemcell.com or contact us to request a copy.

The following protocol is for passaging cells in a single T-75 cm^2 flask. If using other cultureware, adjust cell numbers and volumes accordingly.

1. Thaw ACF Enzymatic Dissociation Solution (#05427) and ACF Enzyme Inhibition Solution (#05428) at 2 - 8°C. Mix thoroughly.

   NOTE: Once thawed, use immediately or store at 2 - 8°C for up to 4 days. Alternatively, aliquot and store solutions at -20°C. Do not exceed the shelf life of the solutions. After thawing the aliquoted solutions, use immediately. Do not re-freeze.
2. Warm the ACF Enzymatic Dissociation Solution and ACF Enzyme Inhibition Solution to room temperature (15 - 25°C). Do not incubate at 37°C.
3. Wash cells once with 4 mL of D-PBS (Without Ca++ and Mg++; Catalog #37350).
4. Add 6 mL of ACF Enzymatic Dissociation Solution.
5. Incubate at 37°C for 2 - 6 minutes. Tap the flask to detach cells. If less than 90% of cells have detached, incubate at 37°C for an additional 1 - 2 minutes and tap the flask again.
6. Add 6 mL of ACF Enzyme Inhibition Solution and collect cells in a polypropylene tube (e.g. 50 mL polypropylene tube [Corning Catalog# 352070]).
7. Wash the flask with 6 mL of one of the following:
   - Complete MesenCult™-ACF Medium (MesenCult™-ACF cultures)
   - Complete MesenCult™-XF Medium (MesenCult™-XF cultures)
8. Place wash into the same polypropylene tube as in step 6.
9. Centrifuge the tube at 300 x *g* for 8 minutes with the **brake on**.
10. Discard the supernatant and resuspend the cell pellet in desired culture medium.