BMEM Dissociation

Ships at room temperature

Catalog number: 1002 500 mL

Product Description

BMEM Dissociation is a ready-to-use, highly optimized, chemically defined, animal component-free, enzyme-free dissociation solution for passaging human induced pluripotent stem cells (hiPSCs) in adherent culture.

BMEM Dissociation contains an optimized concentration of dissociation agents and a BMEM-based buffered solution for optimal cell survival during passaging. BMEM Dissociation has been extensively tested for compatibility with weekend-free and no-change feeding schedules.

BMEM Dissociation is recommend for use with hiPSC cultured in BMEM Human Primed Pluripotent (1001) and BMEM Max Pluripotent (1004).

BMEM Dissociation is compatible with a variety of culture matrices, including: Corning® Matrigel® GFR, Gibco™ Geltrex™ GFR, R&D Systems™ Cultrex™ UltiMatrix GFR, SigmaAldrich® ECMatrix™-511 E8 Laminin, Gibco™ Recombinant Vitronectin, Corning® Synthemax II-SC, Acro Biosystems™ Human Laminin 521 Protein

Each lot of BMEM Dissociation is performance tested on hiPSC and tested for sterility.

Component Name	Size	Storage
BMEM Dissociation	500 mL	Store at room temperature

Instructions for Use

BMEM Dissociation should be stored at room temperature and does not need to be warmed prior to use.

Directions for Use

- **Step 1**
  When cells reach 70-80% confluency (typically 4 days), aspirate used medium. Add 1 mL of BMEM Dissociation to each well of a 6-well plate (or equivalent) and incubate at room temperature for 1 minute.

- **Step 2**
  After 1 minute aspirate the BMEM Dissociation and leave the plate in the cell culture hood an additional 5 minutes.

  NOTE: 6 min total is well-optimized and highly recommended.

- **Step 3**
  Using 1 mL of BMEM Human Primed Pluripotent with ROCK inhibitor or BMEM Max Pluripotent with ROCK inhibitor in a P1000 pipette tip, blast the medium against the culture surface to release the cells. Pipette the BMEM/cells up into the P1000 pipette tip (being careful not to make bubbles) and repeat blasting ~5 times until all cells are released.

  CRITICAL: Avoid pipetting cells too many times as this will decrease cell survival.

- **Step 4**
  Split the cells to the required ratio and transfer to new coated plates

ROCK Inhibitor

Addition of a ROCK inhibitor, such as 10 µM Y27632 or 20 nM Chroman 1 for 24 hours after passage is recommended to provide more reproducible passaging, reduce selective pressure, and allow higher split ratios.

Representative Images

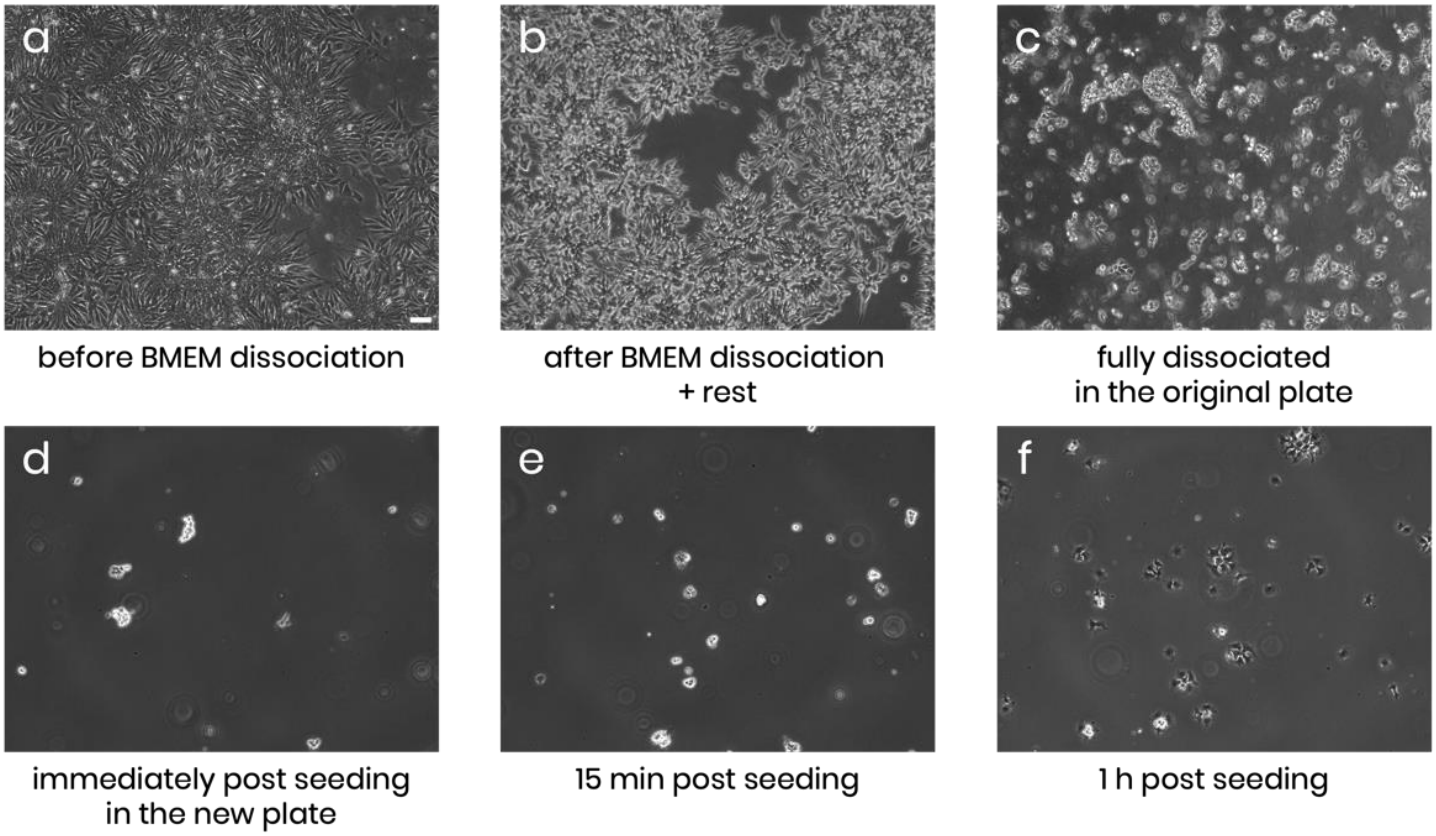

Figure 1. Representative images of passaging BMEM Human Primed Pluripotent-cultured hiPSC using BMEM Dissociation at different time points. (**a**) 80% confluent well before addition of BMEM Dissociation; (**b**) well after the combined 6 minutes of BMEM dissociation and rest; (**c**) immediately after blasting all the cells with BMEM Human Primed Pluripotent with ROCK inhibitor; (**d**) immediately after transferring to the new plate at a 1:25 split ratio; (**e**) 15 min post seeding in the new plate, some cells are already attaching to the bottom of the well. (**f**) 1 h post seeding, the majority of cells attached to the bottom of the well.

Product Use

For Research Use Only.

Not for diagnostic procedures.