

QGel™ Protocol

How to recover cells from QGel™ MT 3D Matrix for sub-culture

ABOUT THIS PROTOCOL

This is an example of how to extract cells from QGel™ MT 3D Matrix for subculture. Note that this is only a guideline; reaction time, type and concentration of proteases should be optimized for your specific application and cell type.

PRODUCT SUPPORT

Brochures, FAQ, additional protocols and videos on: www.qgelbio.com/support

Suggested chemicals/solutions/kits:

- TrypLE™ 1X (Invitrogen™)

Brief procedure description:

1. Transfer desired gel samples (e.g. with a volume of approx. 30-40µL) containing the encapsulated live cells in a new well plate (under cell culture hood) and wash them once with PBS for 20 minutes.
2. Add 500µL trypLE 1X solution to the gels in each well and replace the trypLE 1X solution every 15 minutes until the gels are degraded.

Note: To accelerate the gel digestion process, gels may be cut into pieces using a sterile razor blade/scalpel and processed as described above.

3. At each trypLE solution change, collect the solution/cell suspension and mix it 1:1 with fresh cell culture media containing serum to inactivate trypLE enzyme.
4. Check degradation of the hydrogels under the microscope. If digestion is incomplete gel pieces can be seen floating in the solution.

Note: Digestion process may last 60-90 min for the entire gel (approx. gel volume 30-40µL) and 30-40 min if each gel is cut into pieces.

5. Centrifuge the collected gel digestion solution/cell suspension and aspirate the supernatant.
6. The cell pellets can be resuspended in fresh media and subcultured.