

Hi-C Service Sample Preparation Protocol

Customers may submit 3-10 million cells or 50-100 mg of frozen tissue for Active Motif's Hi-C service. If cells are limited, we can accept a lower limit of 1 million cells. Prepare cell pellet(s) or tissue according to one of the protocols below.

I. Cell Pellet Preparation

Protocol A: Adherent Cells

1. Detach cells using dissociation method specific to your cell type/line.
2. Following dissociation method, transfer cells to a new 15 ml or 50 ml conical tube.
3. Spin at 500 x *g* in a refrigerated centrifuge (4°C) for 5 minutes to pellet cells.
4. Discard supernatant and resuspend cells in 10 ml 1X ice-cold PBS.
5. Spin at 500 x *g* in a refrigerated centrifuge for 5 minutes to pellet cells.
6. Discard all supernatant.
7. Immediately snap freeze pellet in liquid nitrogen or on dry ice.
8. Store cells at -80°C prior to shipment.

Protocol B: Cell Suspension (including FACS sorted cells)

1. Transfer desired number of cells to (vial/tube).
2. Spin at 500 x *g* in a refrigerated centrifuge (4°C) for 5 minutes to pellet cells.
3. Discard supernatant and resuspend cells in 1X ice-cold PBS.
4. Spin at 500 x *g* in a refrigerated centrifuge for 5 minutes to pellet cells.
5. Discard supernatant.
6. Immediately snap freeze pellet in liquid nitrogen or on dry ice.
7. Store cells at -80°C prior to shipment.

II. Tissue Preparation

Consumables

- Cryogenic vial(s) **or** 2 ml low-bind microcentrifuge tube
- Liquid Nitrogen
- Dry ice

Protocol A: Liquid Nitrogen

1. Excise the tissue from the animal and place in a cryogenic vial or microcentrifuge tube.
2. Immediately submerge tube in liquid nitrogen for 2 minutes.
3. Store at -80°C.

Protocol B: Dry Ice

1. Excise the tissue from the animal and place in cryogenic vial or microcentrifuge tube.
2. Immediately place tube on dry ice for 15 minutes.

Best practices for sending cell pellets to Active Motif

- Avoid scraping cell off plate. Scraping cells can cause damage and induce biological changes
- Seal top of the tube with parafilm to avoid tube from opening during transit
- Ensure that there is enough dry ice in the package for transport and any potential shipping delays
- Avoid shipping over the weekend or for Saturday delivery
- Ship samples Monday through Wednesday
- Ensure that a completed sample submission form is included in shipment

Best practices for sending tissue samples to Active Motif

- Avoid overfilling tubes with tissue as this makes it very difficult to extract samples from tube
- Seal top of tube with parafilm to avoid tube from opening during transit
- Ensure that there is enough dry ice in package for transport
- Avoid shipping over a weekend or for Saturday delivery
- Ship samples Monday through Wednesday
- Ensure that a completed sample submission form is included in the shipment