

# Accutase™

**A**ccutase™ has been developed to meet the most demanding needs for gentle and effective detachment of adherent cells. Accutase™ is a ready to use cell detachment solution specially developed for gentle and effective cell dissociation. It is a solution made of proteolytic and collagenolytic enzymes and is a direct replacement for trypsin.

- Detaches adherent cells in minutes
  - Easy to use
- Effective for most cell culture
- Maximum cell viability and plating efficiency



## Advantages :

- Diminished cell damage : Gentle to cells.
- Proteolytic and Collagenolytic: Accutase™ combines proteolytic and collagenolytic activities which maximizes its versatility for cell detachment and tissue dissociation.
- Protection of surface epitopes: Accutase™ gently and rapidly lifts off adherent cells without destroying epitopes being measured with flow cytometry. Cell membranes and surface epitopes will not be harmed and the structural and functional quality of the surface proteins remain completely intact.
- No neutralization required: Accutase™ does not need to be washed out or neutralized like trypsin; the addition of more media inactivates Accutase™, thus saving you much time in your cell passaging work. No more washes!!
- Non mammalian origin: Accutase™ does not contain mammalian or bacterial-derived products.

Accutase™ is particularly useful for detaching cells grown in cell culture media that does not contain serum, including Serum Free Media and Protein Free Media. Accutase™ gently and rapidly dissociates tissues for cell isolation and propagation. Useful for the routine detachment of cells from standard tissue culture plastic ware and adhesion coated plastic ware.

#### Applications :

Accutase™ performs exceptionally well in detaching cells for the analysis of cell surface markers, virus growth assay, quiescence assays by serum starvation, transformation assays by oncogene transfection, neural crest cell migration assays, cell proliferation, cell haptotaxis, tumor cell migration assays, routine cell passage, production scale-up (bioreactor) and flow cytometry.

#### Cell Lines Tested :

Accutase™ has been proven effective in detaching fibroblasts, keratinocytes, vascular endothelial cells, hepatocytes, vascular smooth muscle cells, hepatocyte progenitors, primary chick embryo neuronal cells, bone marrow stem cells, adherent CHO and BHK cells, macrophages, 293 cells, L929 cells, immortalized mouse testicular germ cells, 3T3, Vero, COS, HeLa, NT2, MG63, M24 and A375 metastatic melanoma, gliomas U251, D54, HT1080 fibrosarcoma cells, Sf9 insect cells, human embryonic stem cells, human mesenchymal stem cells and human neural stem cells.

#### Formulation :

TCL075 is 1X Accutase™ enzymes in Dulbecco's Phosphate Buffered Saline and 0.5mM EDTA tetra sodium salt.

#### Directions for Use

1. Pour off the media covering the adherent cells.
2. Wash the cells using balanced salt solution without calcium and magnesium. Rinse the cell sheet by rocking the flask for 1 to 2 minutes and discard the wash solution.
3. Add enough Accutase™ to just cover the cell layer in the culture vessel using aseptic procedures.
4. Set culture vessel aside in hood and allow cells to detach for about 5-10 minutes.
5. Observe cells, when they have become semi-floating balls, tap the culture vessel a couple of times against the palm of your hand.
6. Add the medium to the flask. Disperse the cells into single cell suspension by pipetting repeatedly. Most cells can be left in Accutase™ up to 1 hr without effect.
7. Count the cells and passage as usual. No additional washes or enzyme inhibitors are required.

Note: Accutase™ does not need to be removed in normal cell passaging. The addition of media back into the Accutase™ detached cells will neutralize the Accutase™. In addition, Accutase™ normally will not kill cells if left in for too long.

#### Storage and Shelf Life :

Store the product at -20°C.

Accutase™ is stable for two months at 4°C and two years at -20°C.

Product Specifications	Code	Packing
Accutase™ 1X Accutase enzymes in Dulbecco's Phosphate Buffered Saline	TCL075 TCL075 TCL075	1x100ML 5x100ML 1x500ML

*Accutase™ is the registered trade mark of Innovative Cell Technologies Inc.*