

# ZymeFree™ Enzyme Free Cell Dissociation Reagent

in Dulbecco's Phosphate Buffered Saline Cell Culture Tested

**Product Code: TCL028**

## Product description:

TCL028 is ZymeFree™ cell dissociation reagent in Dulbecco's Phosphate buffered saline. It is used for gentle removal of adherent cells from each other and from the surface of a culture vessel. This enzyme free formulation helps in preserving the structural and functional integrity of the cell surface proteins. It also helps in avoiding the cytotoxic effects sometimes associated with the chelating agents. This product is very useful for studies that require intact cell surface proteins such as ligand binding, flow cytometry and immunohistochemistry and as a trypsin alternative in serum free culture work.

ZymeFree™ works as quick as trypsin on most cell lines. It holds the advantage over enzyme based dissociation solutions as it does not cause cytotoxicity, even after cells are exposed to it for prolonged period.

## Directions for use:

Dissociation of cells from culture vessel

1. Remove the spent medium from the culture vessel by aspiration.
2. Wash the monolayer by adding balanced salt solution without calcium and magnesium to the side of the flask opposite the cells.
3. Rinse the cell sheet by rocking the flask for 1 to 2 minutes and discard the wash solution.
4. Add ZymeFree™ solution to the side of the flask opposite the cells as per the quantity specified in the table. The volume should be sufficient enough to completely cover the monolayer of the cells.
5. Rock the flask to ensure that the dissociation solution covers the cell sheet. Firmly tap the vessel against the palm of hand to dislodge the cells.
6. Observe the flask under microscope for rounding of cells. If the cells do not dislodge quickly allow the culture

vessel to sit at room temperature for additional 2-3 minutes and again tap the culture vessel against the palm. Repetition of the procedure might be required for certain strong adherent cells.

Note:- The exact time needed to dissociate cells will vary according to the cell line. The dissociation process should be monitored closely to avoid cell damage.

7. After the cells are completely dislodged from the surface of the culture vessel add complete growth medium to the cells.

8. Disperse the cells into a single cell suspension by pipetting repeatedly.

9. Count and subculture the cells.

## Quantity of ZymeFree™ required per culture vessel

Type of culture vessel	Quantity of ZymeFree™ required
T175 flask	15ml
T75 flask	5ml
T25 flask	3ml
6 well plate	500µl
12 well plate	200µl
24 well plate	100 µl

## Quality Control:

### Appearance

Clear colourless solution.

### pH

6.90 - 7.50

### Osmolality in mOsm/Kg H<sub>2</sub>O

280.00 -320.00

### Cell Dissociation Test

Passes

**Sterility**

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

**Endotoxin Content**

NMT 5EU/ml

**Storage and Shelf Life:**

Store at 15 - 30°C.

Shelf life of the product is 24 months.

Use before expiry date given on the product label.

**Disclaimer:**

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