

DID YOU KNOW

YOU CAN ENABLE GENTLE CELL DISSOCIATION WITH TRYPLE EXPRESS REAGENTS?

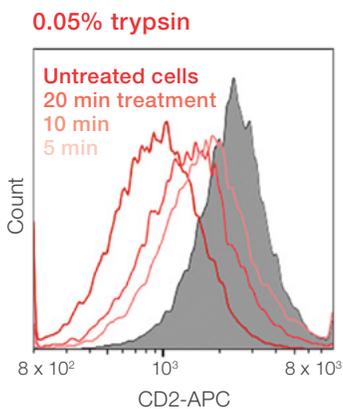


Cell surface proteins are essential for the normal functioning of cells in culture. The epitopes at the cell surface are important in techniques that leverage them, such as phenotyping cells in flow cytometry. Gibco™ TrypLE™ Express Enzyme is a highly purified, recombinant cell-dissociation enzyme that replaces porcine trypsin. Ideal for dissociating attachment-dependent cell lines, TrypLE Express Enzyme can directly substitute for trypsin without protocol changes.

TrypLE Express Enzyme is:

- **Stable at room temperature**—no need to freeze it, so TrypLE Express Enzyme is ready whenever you need it
- **Gentle on cells**—protect your cell's surface proteins (Figures 1 and 2)
- **Animal origin-free**—absent of hazards from potential pathogenic contaminants

A



B

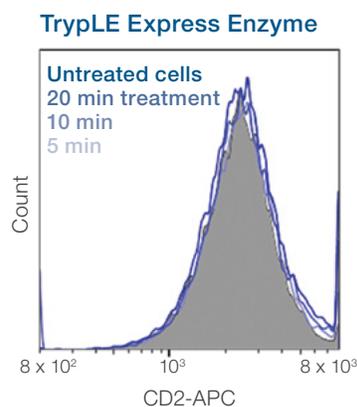
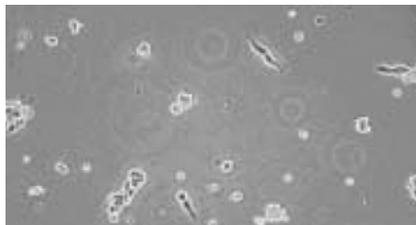


Figure 1. TrypLE Express Enzyme outperforms trypsin in preserving cell surface epitope expression. Jurkat cells were treated with **(A)** 0.05% trypsin or **(B)** TrypLE Express Enzyme for a period of up to 20 minutes. Cell surface CD2 was then quantitated via flow cytometry with an APC-conjugated anti-CD2 monoclonal antibody. While cells treated with 0.05% trypsin show a clear time-dependent reduction in CD2 levels, those treated with TrypLE Express Enzyme show no CD2 loss.

Workflow benefits when using TrypLE Express Enzymes

TrypLE Express Enzymes may be able to simplify your workflow. For example, cells treated with either animal trypsin or TrypLE Express Enzyme and replated with Gibco™ OptiPro™ SFM were left unwashed post-dissociation. No protease inhibitors were used, and morphology was recorded 24 hours later. As seen below, TrypLE Express Enzyme–treated cells retain their structure while trypsin cells experience further cellular degradation.

Animal trypsin–treated cells



TrypLE Express Enzyme–treated cells

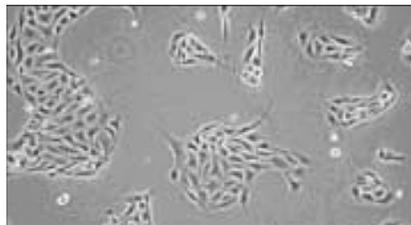


Figure 2. TrypLE Express Enzyme–treated cells retain their structure when left unwashed after dissociation without protease inhibitors. While TrypLE Express Enzyme–treated cells maintained their morphology under these conditions, trypsin-treated cells experienced further degradation.

Ordering information

Product	Size	Cat. No.
TrypLE Express Enzyme (1X), phenol red	100 mL	12605010
	20 x 100 mL	12605036
	500 mL	12605028
	5 L	12605093
TrypLE Express Enzyme (1X), no phenol red	100 mL	12604013
	20 x 100 mL	12604039
	500 mL	12604021

Find out more at thermofisher.com/tryple

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