

## TRS

Cell transport solution, designed for short-term cell storage without freezing.

This serum-free, animal-component-free, ready-to-use solution ensures optimal cell protection at +4 °C or ambient temperature.



### BENEFITS

TRS is a specialized, ready-to-use solution for short-term cell storage at +4 °C or room temperature. It preserves cell integrity without freezing, making it ideal for cell transport. It is free of toxic components, animal-derived substances or proteins.

**Free of toxic substances:** It doesn't contain toxic substances, thus no traces of toxic substances are attached to the cells. Further application of cells for therapeutic purposes is simplified.

**Serum-free and animal component free:** Reduces the risk for animal derived contaminants.

**Fully defined:** It doesn't contain proteins or hydrolysates; thus, experimental variability is reduced.

**Antibiotic-free:** No risk of antibiotic traces, hidden contamination and endotoxins.

### SPECIFICATION

Regulatory	Free of serum, animal component, hydrolysate, protein, antibiotic, toxic subst.
Available Form	Liquid
Cell Line	All cells
Storage Cond.	2-8 °C, protect from light
Stable	12 months
Application	Cell transportation, Short term cell storage

## APPLICATION

TRS is a preformulated solution containing a specialized blend of buffers and polymers designed to suppress ion channel activity across cell membranes while maintaining equilibrium between intracellular and extracellular ion concentrations. This reduction in ion channel function minimizes cellular energy expenditure. TRS contains further substances which supply the cells with quick energy, thereby keeping cell viability high during extended storage at +4 °C or room temperature.

Consequently, TRS is highly suitable for short-term cell preservation in scenarios where cryopreservation is impractical or undesirable. It is optimized for applications in stem cell research and supports reliable cell transport for durations of up to 4 days. Its capacity to sustain cellular integrity, particularly in xenofree conditions, positions TRS as an effective tool for non-frozen cell logistics under controlled temperature settings.

## CONSERVING CELLS

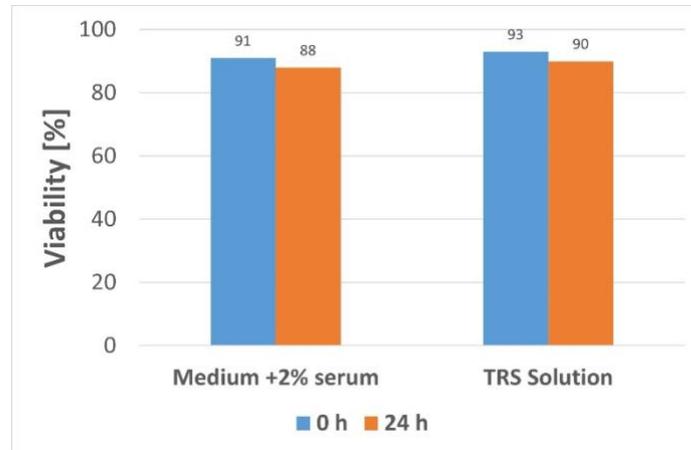
Centrifuge the cell suspension (400 g, 4 min., 4 °C) to collect the cell pellet. Aspirate the supernatant, taking care not to disrupt the pellet. Resuspend the pellet gently in 1 mL of cold TRS solution, ensuring the temperature is maintained between 2–8 °C. Transfer the suspension to a 2 mL cryotube, and store the sample at 2 – 8°C for transport.

## CELL RECOVERY

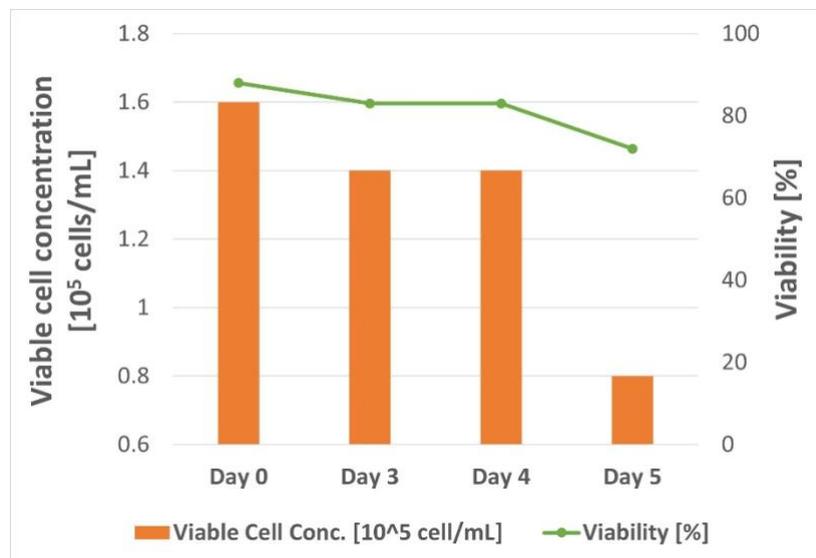
Upon arrival, gently resuspend the cells in the cryotube and transfer the suspension to a 15 mL Falcon tube containing 5 mL of cold culture medium. Centrifuge (400 rpm, 4 min., 4 °C) and discard the supernatant, ensuring minimal disturbance to the pellet. Resuspend the cells in pre-warmed culture medium and transfer the cell suspension into the culture vessel. Perform a viable cell count and incubate the cells in your preferred culture conditions.

# PERFORMANCE

## Human Mesenchymal Stem Cell Transport

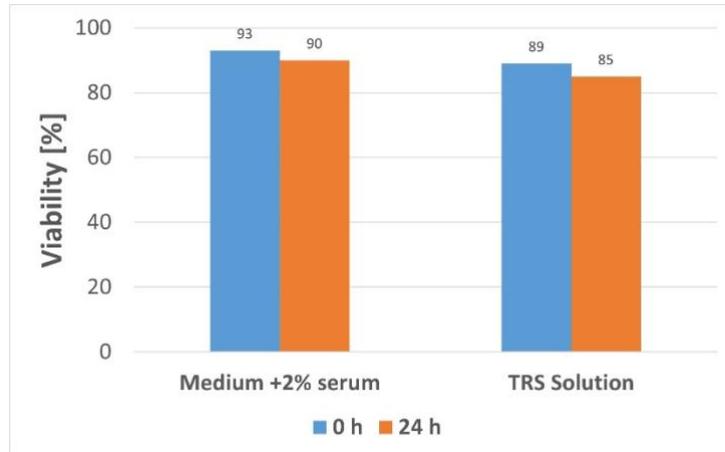


**Figure 1** Comparison viability of Mesenchymal Stem Cells (MSCs) after 24-hour storage at +4°C in the transport solution (TRS) versus freezing in medium +2% serum as a control. The 0-hour (0 h) measurement represents the viability before storage or freezing, while the 24-hour (24 h) measurement represents the viability after storage in TRS or after thawing frozen cells. The control group (Medium +2% serum) represents standard dry ice transportation, where cells were frozen and thawed. The TRS solution was tested as an alternative at +4°C to eliminate the need for dry ice while maintaining similar effects on cell viability and recovery.



**Figure 2** Comparison of viable cell concentration and cell viability of Mesenchymal Stem Cells (MSCs) after 3 to 5 days of storage at +4 °C in the TRS transport solution. Cells were stored for either 3, 4, or 5 days in TRS solution at +4 °C, then seeded into culture medium, and immediately assessed for viable cell concentration (orange bars) and viability (green line). The results show a minimal decrease on cell concentration and viability the first 4 days. The loss on viability and cell concentration during the first 4 days is comparable to if cells would have been frozen.

## MDBK Cell Transport



**Figure 3** Comparison of viability of MDBK cells after 24-hour storage at +4°C in the transport solution (TRS) versus freezing in medium +2% serum as a control. (A) The 0-hour (0 h) measurement represents the viability before storage or freezing, while the 24-hour (24 h) measurement represents the viability after storage in TRS or after thawing from freezing. The control group (Medium +2% serum) represents standard dry ice transportation, where cells were frozen and thawed before counting. The TRS solution was tested as an alternative at +4°C to eliminate the need for dry ice while maintaining similar effects on cell viability and recovery. These results highlight the impact of storage conditions on MDBK survival and transport feasibility.

## MEDIA SUPPLY SECURITY



- Our media are manufactured by partners, Eminence Scientific (China) and Capricorn Scientific (Germany), ensuring a consistent global supply from two strategic locations.
- Produced under GMP standards by Eminence Scientific or Capricorn Scientific, our media comply with EMA and FDA regulations.
- Available in liquid form, in GMP or non-GMP grades, tailored to customer specifications.
- GMP batch sizes reach approximately 2,000 L of liquid media.
- Media are supplied directly by Eminence Scientific or Capricorn Scientific.
- Through our extensive distribution network, we deliver to nearly every country worldwide.
- We invite our valued customers to tour our cutting-edge production facilities in Germany or China.

## TECHNICAL SUPPORT

Developer	Contact
	info@florabio.com.tr

The developer of the culture media and solutions is Florabio A.S. We welcome our valued customers to contact us about any questions you might have in media characteristics or application of medium in your lab. We would be please to share our experience with you.

## ORDERING INFORMATION

<b>Name</b>	<b>Application</b>	<b>Formulation</b>	<b>Volume</b>	<b>Catalogue number</b>
<b>TRS</b>	Transportation Solution	Liquid	0.1 L	TRS1-L01
<b>TRS</b>	Transportation Solution	Liquid	0.5 L	TRS1-L05
<b>TRS</b>	Transportation Solution	Liquid	1 L	TRS1-L1

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