

gentleMACS[™] Perfusion Technology –

perfusion has never been so easy

To make your lab life less complicated, we have developed an automated perfusion technology that runs on the well-established gentleMACS Platform. Learn how to easily isolate primary, highly fragile cell types like hepatocytes or cardiomyocytes from rodent organs and benefit from the following advantages:

- Automated and fast to learn no extensive training required.
- Works with resected organs.
- Up to eight perfusions can be performed simultaneously on one instrument.

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Traditional rodent organ perfusion procedures are challenging. They require extensive training, steady hands, and long-standing experience. Purchasing commercially available frozen primary cells can be risky, because the effects of freezing and thawing are unpredictable and the cell viability may be too low for your downstream applications. We have solved all these complications with the gentleMACS Perfusion Technology, yielding viable primary cells that can subsequently be cultured or used for downstream analysis, such as genetic and proteomic analysis or functional assays.

Rodent liver perfusion

The Liver Perfusion Kit, mouse and rat, has been developed for the gentle, rapid, and efficient generation of single-cell suspensions from rodent liver based on *ex vivo* perfusion using gentleMACS Perfusers. It requires only one liver lobe and works with resected liver tissue. Furthermore, it is optimized to obtain a high yield of hepatocytes and non-parenchymal cells in 45 minutes while preserving most important cell surface epitopes.

Mouse heart perfusion

The Heart Perfusion Kit, mouse, compatible with the gentleMACS Perfusers 2 for small organs, enables the gentle and efficient generation of single-cell suspensions from resected mouse hearts. The kit has been optimized to provide a high yield of primary cardiomyocytes, cardiac fibroblasts, smooth muscle cells, and endothelial cells, and also preserves the most important cell surface epitopes.

Be among the first to introduce this perfusion procedure into your lab and start reaping the benefits of uncomplicated and automated organ perfusions.

One-time investments

Product	Order no.
gentleMACS Octo Dissociator with Heaters	<u>130-134-029</u>
gentleMACS Perfusion Sleeves (4 pieces)	<u>130-128-752</u>

Running costs

Product	Order no.
gentleMACS Perfusers (25 tubes)	<u>130-128-151</u>
gentleMACS Perfusers 2 (25 tubes)	<u>130-134-803</u>
Liver Perfusion Kit, mouse & rat (25 preps)	<u>130-128-030</u>
Heart Perfusion Kit, mouse (25 preps)	<u>130-134-266</u>
gentleMACS C Tubes (25 tubes)	<u>130-093-237</u>
MACS [®] SmartStrainers (100 µm) (50 filters)	<u>130-098-463</u>
MACS Tissue Storage Solution (optional)	<u>130-100-008</u>
Debris Removal Solution (optional)	<u>130-109-398</u>



Discover this automated and easy-to-learn technology for effortless *ex vivo* perfusion: miltenyibiotec.com/perfusion

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