

Mitochondria Isolation Kit, human

Yield and integrity have never been higher

Achieve higher yields of functional mitochondria as compared to differential- and ultracentrifugation protocols.¹ The kit's procedure relies on the renowned MACS® Technology. After cell lysis, an outer mitochondrial membrane molecule is used to magnetically isolate functional organelles. Interested? Turn page for details.

¹ Hornig-Do *et al.* (2009) *Anal. Biochem.* 389: 1–5.

- **High yield of isolated mitochondria**
- **Organelle integrity maintained**
- **Size independent isolation**
- **High purity**
- **Fast — less than 2 hours**

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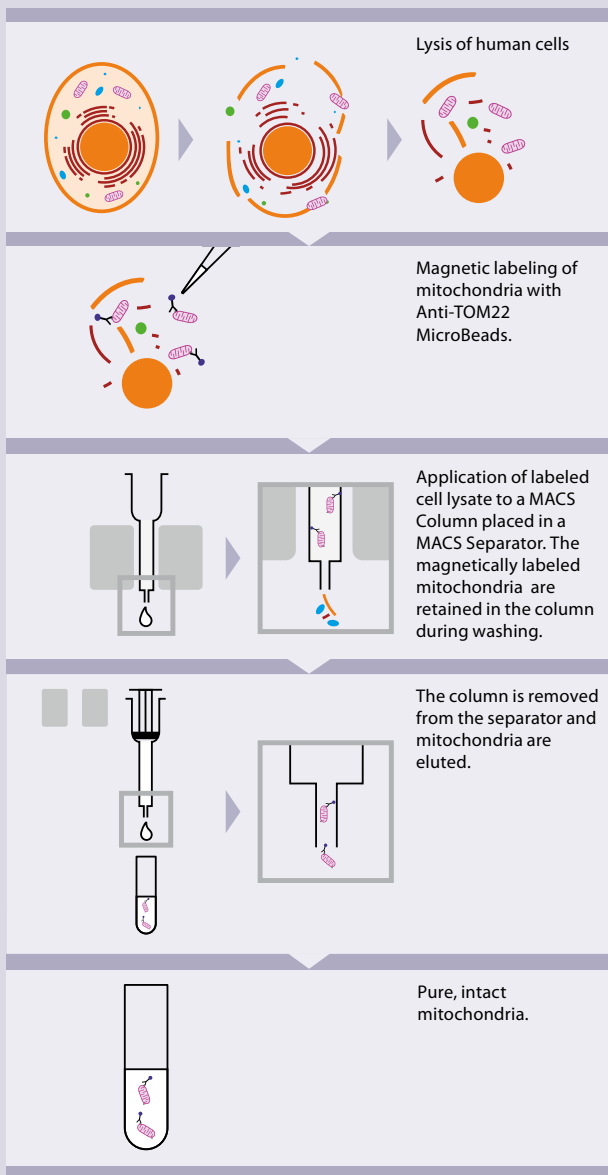


Fig. 1: The operating principle of mitochondria isolation using MACS Technology.

MACS® Technology for isolation of intact mitochondria

The Mitochondria Isolation Kit, human allows isolation of intact, viable mitochondria from human cells or tissue in less than 2 hours.

The kit's procedure is based on the gentle MACS® Technology that combines high yield and purity with integrity of the isolated mitochondria. After cell lysis, the translocase of the outer mitochondrial membrane 22 (TOM22) is targeted by Anti-TOM22 MicroBeads to magnetically isolate functional human mitochondria. For details please refer to figure 1.

Benefits

High yield of isolated mitochondria

With MACS Technology, higher yields of intact, viable mitochondria are achieved when compared to standard approaches, such as differential or density gradient centrifugation¹. Moreover, this outstanding performance is possible irrespective of organelle size or mass.

Integrity of isolated mitochondria

MACS Technology is very gentle to cells and cellular organelles, therefore, the isolated mitochondria maintain their integrity resulting in reliable and reproducible data in functional assays¹.

High purity of isolated mitochondria

Compared to differential centrifugation, mitochondria isolated with MACS Technology show less contamination from other cell organelles, such as endoplasmic reticulum or nucleus¹.

¹ Hornig-Do *et al.* (2009) *Anal. Biochem.* 389: 1–5.

Product	Capacity	Components	Order no.
Mitochondria Isolation Kit, human	25 isolations	1.25 mL human Anti-TOM22 MicroBeads, buffers, LS Columns	130-094-532
Mitochondria MidiMACS Starting Kit	25 isolations	1 Mitochondria Isolation Kit, 1 MidiMACS™ Separator, 1 MACS MultiStand	130-094-872
Mitochondria QuadroMACS Starting Kit	25 isolations	1 Mitochondria Isolation Kit, 1 QuadroMACS™ Separator, 1MACS MultiStand	130-094-833



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