

Serum free

# Pancreas TumorMACS Medium

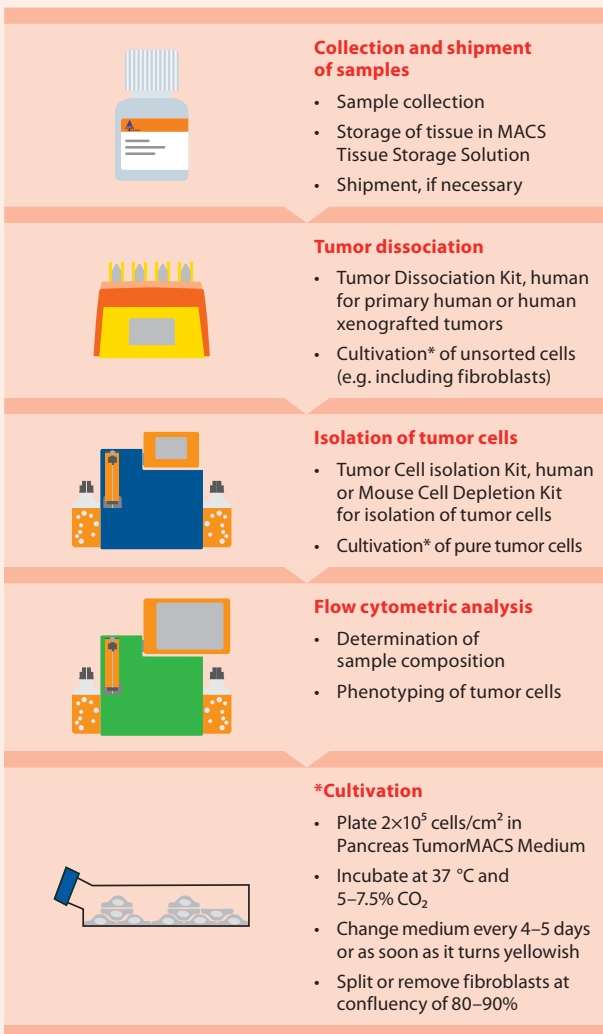
For primary and xenotransplanted pancreatic tumors

- Allows for efficient derivation and expansion of tumor cell cultures from pancreatic tumors
- Improves *in vitro* models for pancreatic cancer research and drug screening
- Preserves parental tumor heterogeneity, tumor-initiating capacity, and genetic stability
- Enables to establish stable cell lines from primary tumor tissue

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## Primary cell lines from solid tumors

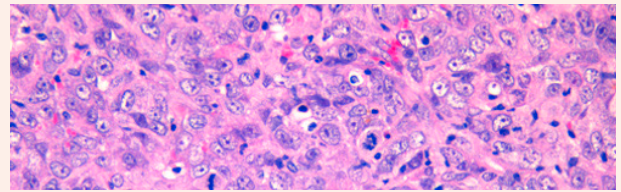
Miltenyi Biotec offers a standardized workflow for deriving stable primary cell lines from solid tumors (fig. 1) for the long-term cultivation of pancreatic tumor cells.



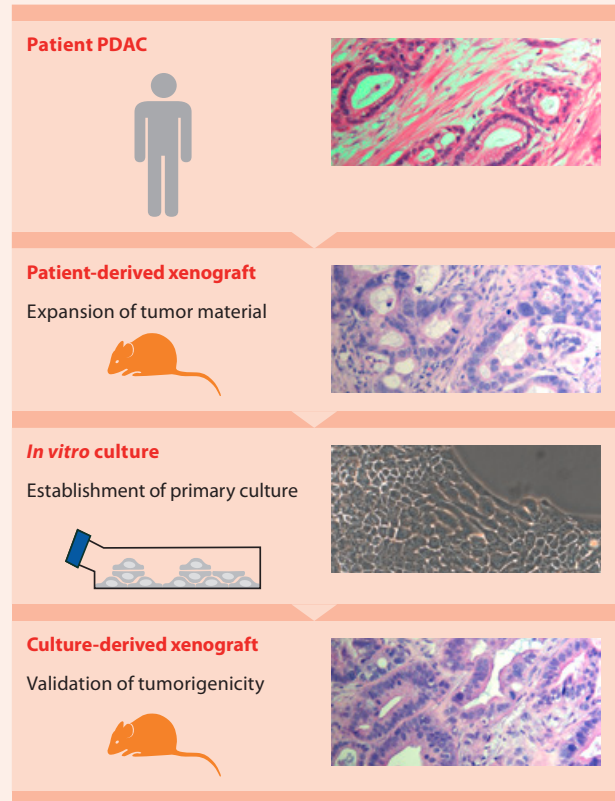
**Figure 1:** Workflow overview on how to establish a stable cell line from primary pancreas tumor cells.

## Preserved heterogeneity of initial tumors *in vivo*

Tumors derived from established pancreatic cancer cell lines, such as PANC-1 fail to reflect the histological and functional features of primary human tumors (fig. 2), making the direct comparison to primary tissue impossible. In contrast, cell lines derived from primary tumors or patient-derived xenografts and propagated in Pancreas TumorMACS Medium retain their initial heterogeneity (fig. 3). This morphological and phenotypic heterogeneity as well as the preserved tumor-initiating capacity and genetic stability lead to improved *in vitro* models.



**Figure 2:** PANC-1–derived xenografts show a homogeneous histology.



**Figure 3:** Patient-derived pancreatic tumor cells were injected into mice. Tumor tissue was extracted from the xenograft, cultured in Pancreas TumorMACS Medium over multiple passages, and re injected into mice for the validation of tumorigenicity.

For more information, download our scientific poster:  
[www.miltenyibiotec.com/tumormacs](http://www.miltenyibiotec.com/tumormacs)

## Order information

Product	Order no.
MACS® Tissue Storage Solution	130-100-008
Tumor Dissociation Kit, human	130-095-929
gentleMACS™ Octo Dissociator with Heaters	130-096-427
C-Tubes	130-096-334
Tumor Cell Isolation Kit, human	130-108-339
Mouse Cell Depletion Kit	130-104-694
autoMACS® Pro Separator - Starter Kit	130-092-545
Pancreas TumorMACS Medium	130-119-484

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