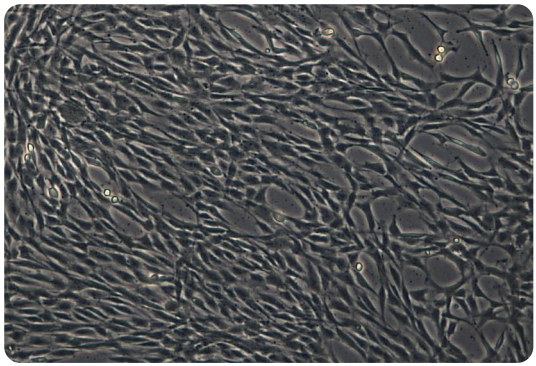
denovoMATRIX
ENABLING BIOLOGY IN VITRO

myMATRIX MSC
BIOMATRICES FOR CELL CULTURE

Information sheet

denovoMATRIX develops and manufactures biomimetic coatings that enable the culture of a wide variety of primary cells, stem cells, and established cell lines. In vivo, extracellular matrix (ECM) molecules serve specific roles, which contribute to regulation of adhesion, differentiation, migration, phenotype, organization, and structure. Our myMATRIX coatings recapitulate key functions of the natural ECM making cell culture easy, robust, and biologically relevant.



KEY FEATURES

- Ready-to-use
- Animal and human component-free/chemically defined
- Supports hMSC adhesion and proliferation
- Consistent and robust growth rate
- hMSCs retain multipotency
- Stable for 12 months at room temperature
- Specifically tailored micro-environment for long-term cultivation of hMSCs in serum-/xeno-free culture conditions

myMATRIX MSC-CTG

- Did you know that our myMATRIX MSC is also available in Cell Therapy Grade (CTG)?
- We provide for CTG materials:
  - ✓ Certificate of Origin statement
  - ✓ Pharma grade quality of raw materials
  - ✓ Extended quality control & documentation

Read our peer-reviewed publication on myMATRIX MSC

Keep in touch!
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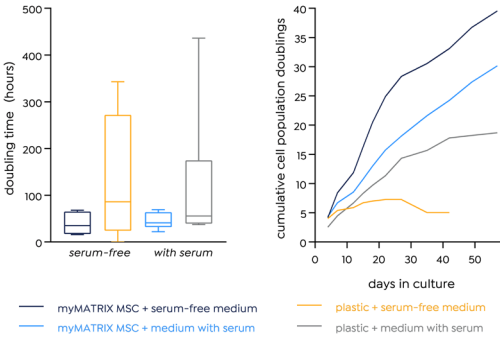
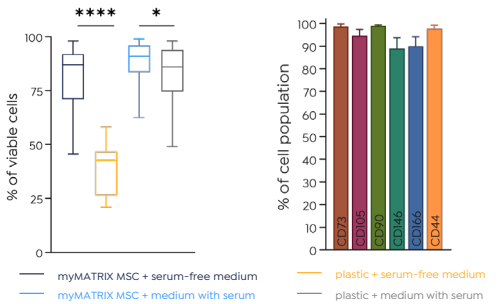
For more information about myMATRIX MSC and other products, please visit
www.denovomatrix.com

Large-scale production of MSCs with consistency across scales
isoMATRIX I **myMATRIX MSC** I beadMATRIX



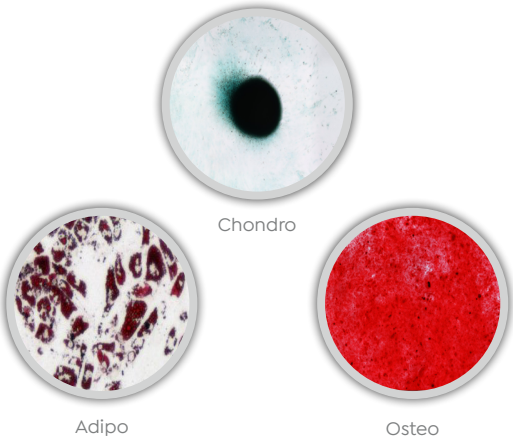
Growth

- myMATRIX MSC facilitates efficient hMSC attachment
- during long-term culture, cell expansion on myMATRIX MSC results in higher cell numbers, i.e., shorter doubling times (left panel) and higher cumulative population doublings (right panel)



Viability & CD marker

- myMATRIX MSC supports constantly high cell viability
- isoMATRIX-derived hMSCs maintain their characteristic CD marker profile
- CD73/105/90/146/166/44 ≥ 95%
- negative markers ≤ 2%



DIFFERENTIATION CAPACITY

- adipogenic differentiation is visualized by Oil Red O staining of cytoplasmic lipid droplets
- high osteogenic differentiation potential results in strong Alizarin Red staining of calcium phosphate deposits
- proteoglycans stained with Alcian Blue demonstrate chondrogenic differentiation

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For more information about isoMATRIX and our other products, visit **www.denovomatrix.com**

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