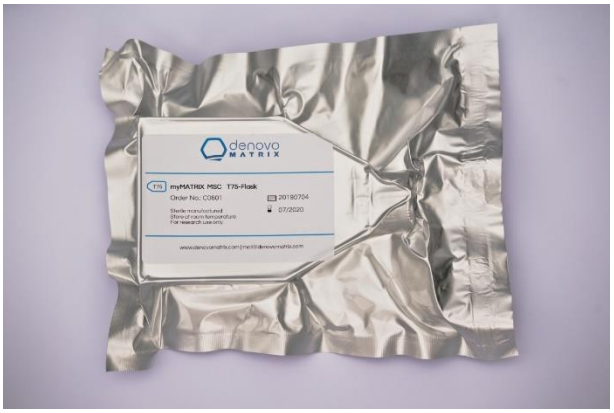
denovoMATRIX GmbH - 22.08.19 denovoMATRIX introduces ready-to-use, chemically defined coated cell cultureware for serum-free hMSC expansion

22.08.19 PRESS RELEASE



Due to their high accessibility and extensive beneficial properties, human Mesenchymal Stem Cells (hMSC) offer exciting promises in a plethora of applications in regenerative medicine, particularly in cell-based therapies. The major challenge of hMSC-based therapy is the large-scale expansion of cells in order to achieve the cell numbers necessary for therapeutic treatment. Currently, bovine-derived fetal calf serum and human plasma-derived fibronectin are commonly used in hMSC culture. These biological extracts frequently reduce experimental reproducibility, and represent a liability for manufacturers of hMSC. To increase lot-to-lot consistency and eliminate the risk of transmission of xenogenic infectious agents, defined cell culture conditions including media and extracellular matrix mimetic coatings are essential.


denovo MATRIX

APPLICATION NOTE No. 347

myMATRIX MSC – Chemically Defined and Extracellular Matrix-mimetic Cultureware for Rapid hMSC Expansion

Kristina Thamm, Steffen Lück, Richard Wetzel
denovoMATRIX GmbH

Abstract

denovoMATRIX has now introduced a ready-to-use coating composed of chemically defined components. The new product - termed myMATRIX MSC - promotes adhesion, proliferation and high viability of hMSC. According to the manufacturer, this novel surface supports long-term expansion of hMSCs over 10 passages and more than 25 population doublings. Furthermore, myMATRIX MSC enables expansion of hMSC in both serum-free and xeno-free media conditions.

Vision for the future?

Enabling animal-component free processes for large-scale manufacturing of hMSC.
The field of cell-based therapies just took a step closer.

Read the application note about myMATRIX hMSC, including detailed expansion analysis of hMSC here.

About denovoMATRIX

denovoMATRIX develops and manufactures biomimetic coatings for the cultivation of human stem cells. Our focus is on enabling culture conditions for stem cells closer to the natural conditions found in the body. Our products offer a biologically relevant solution, which is both chemically defined, and modular for adapting to specific applications. Our vision is to enable human biology in vitro, beginning with Life Science research and onwards to cell therapies of the future.

Contact

denovoMATRIX GmbH
Christian Woiwod
Tatzberg 47/49
01307 Dresden
mail@denovomatrix.com