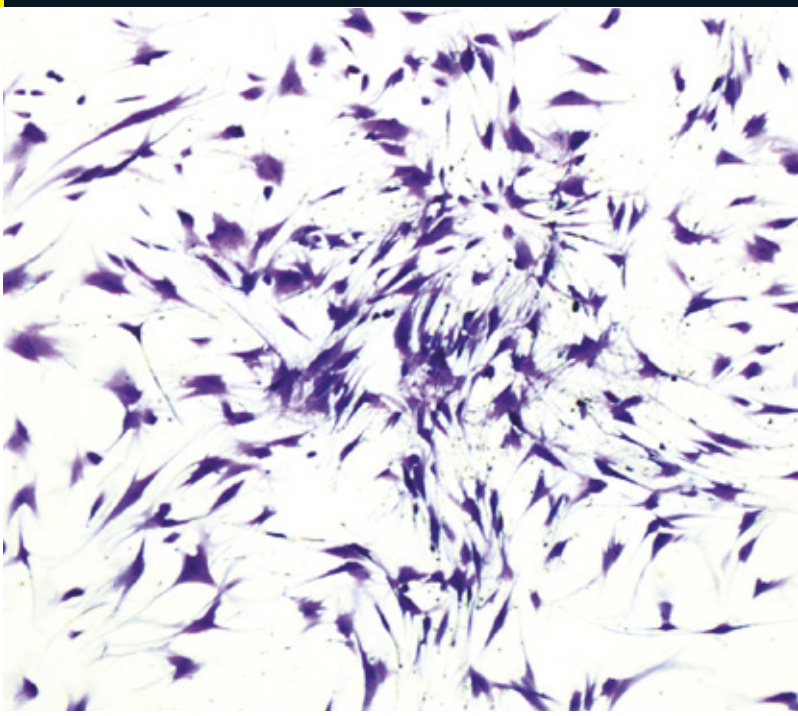
SARTORIUS

Product Datasheet

NutriCoat™ Attachment Solution



Cost-Effective, Efficient, Standardized Supplement Designed for the Attachment of Human Mesenchymal Stem Cells Under Serum-Free and Xeno-Free Culture Condition.

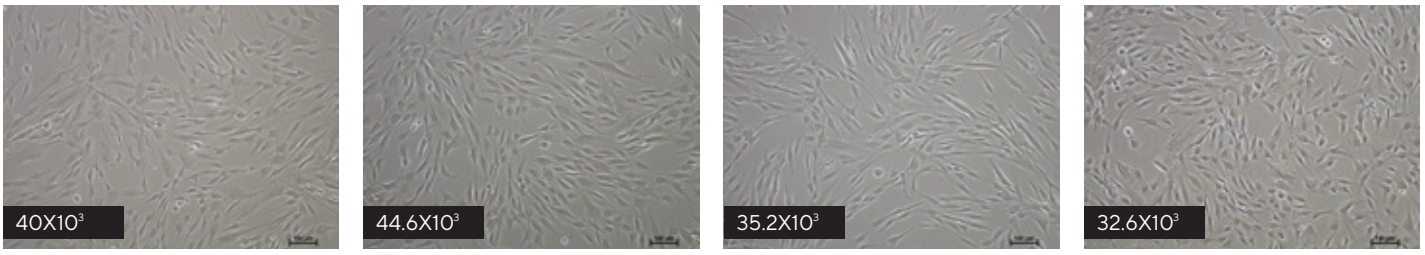
- Defined substrate containing clinical-grade human Fibrinogen (xeno-free)
- Easy-to-use stock solution for easy handling
- cGMP Manufactured
- Suitable for both hMSC expansion and differentiation
- Supports long-term multi-potency of hMSC
- Validated for multiple sources of human MSC culture
- Allows quick transition from research to clinical applications

NutriCoat™ is a defined substrate based on clinical-grade human Fibrinogen, designed for the attachment of human mesenchymal stem cells (hMSC) in serum-free (SF) and xeno-free (XF) culture systems. NutriCoat™ Attachment Solution is optimal for adherence of hMSC's from multiple sources (e.g. AT, CT, BM, DP) when cells are cultured with MSC NutriStem® XF Medium (Cat. # 05-200-1).

The substrate supports long term culturing of hMSC, as well as their enumeration using the colony forming unit-fibroblast (CFU-F) assay under SF and XF culture conditions. NutriCoat™ is a ready- to-use solution store at RT and offers a more affordable option when compared to other commonly used products.

NutriCoat™ is part of our Nutri™ product line, which reduces the burden of qualifying reagents during transition from research to clinical applications. NutriCoat™ is ideal for cell therapy research applications such as bone/cartilage diseases, bone marrow transplants/GVHD, cardiovascular disease, autoimmune disease, liver disease and cancer.

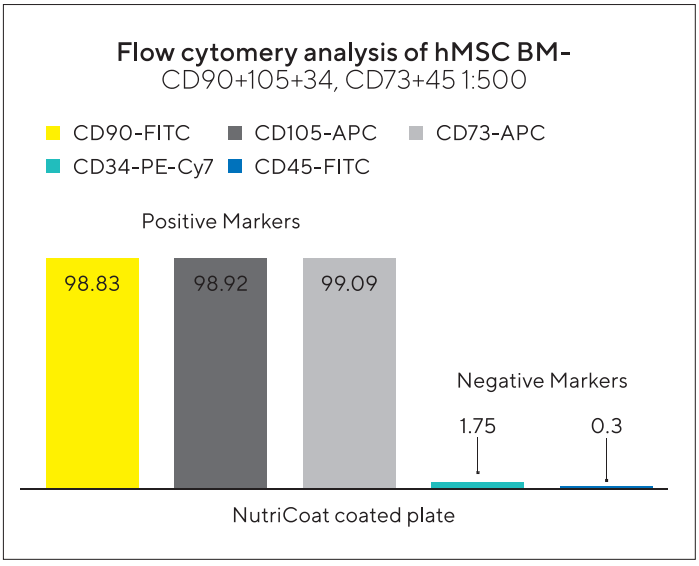
Suitable to hMSC From Various Sources



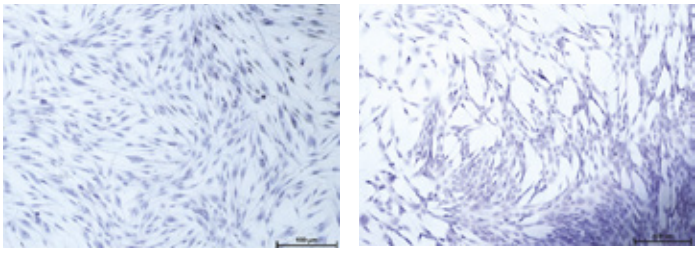
hMSC-AT hMSC-BM hMSC-CT hMSC-DP

Figure 1: Optimal growth in serum-free conditions. hMSC were cultured in MSC NutriStem® XF on plates coated with NutriCoat™. hMSC maintained typical fibroblast-like cells morphology.

A. FACS analysis



B. CFU-F assay 18 days



hMSC-AT hMSC-BM

C. Karyotype analysis

Fig.2. NutriCoat™ Attachement Solution supports long term expansion of hMSC in a serum-free, xeno-free environment. hMSC expanded in MSC NutriStem® XF using NutriCoat™ pre-coated cultureware. Flow cytometry analysis of hMSC-BM after 2P expression -CD90+105+34 1:250; CD73+45 1:500 (A). Representative images of colonies stained with 0.5% crystal violet (x100) (B). Normal karyotype of hMSC-BM P9(9) D16.5 (C).

Maintains Trilineage Differentiation Potential

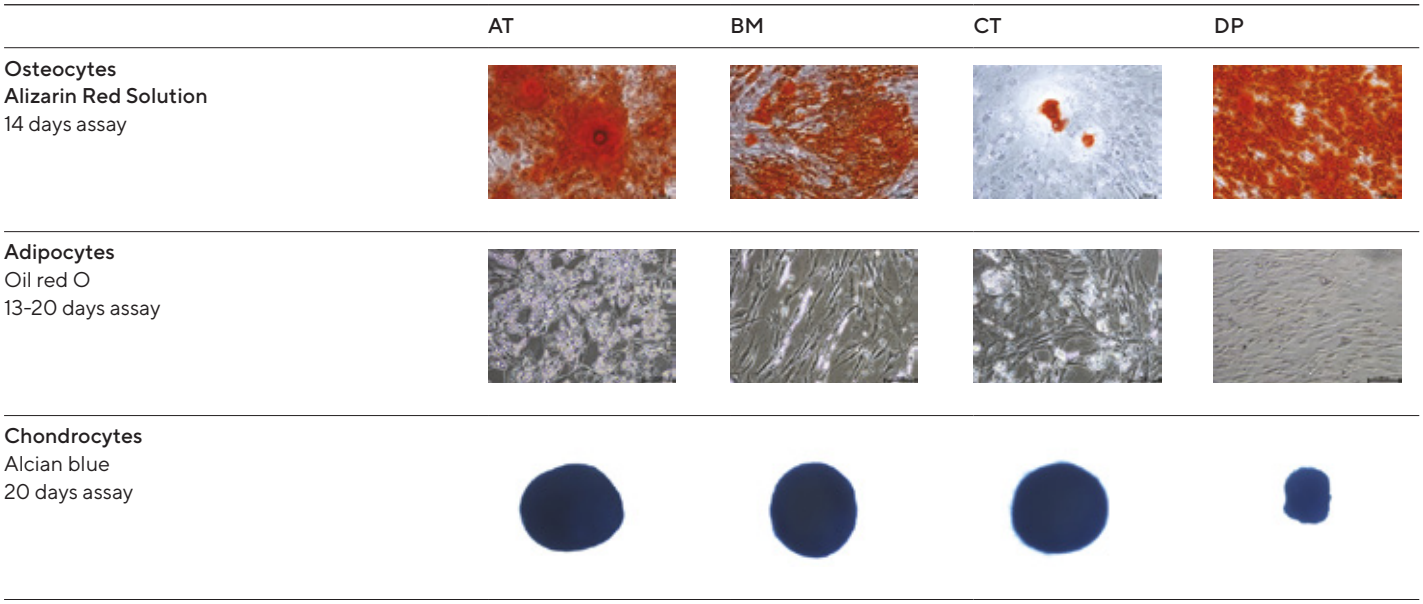


Figure 3. hMSCs from various sources (AT, BM, CT, DP) were cultured in MSC NutriStem® XF Medium on NutriCoat™, and were seeded into MSCgo™ Adipogenic / MSCgo™ Osteogenic / MSCgo™ Chondrogenic Differentiation Media for up to 20 days, revealing Adiopocytes (Oil Red O lipid stains), Chondrocytes (Alcian Blue glycosaminoglycan stain) and Osteoblasts (Alkaline Phosphatase cell surface glycoprotein stain).

Ordering Information

Cat . #	Product	Qty
05-760-1-15	NutriCoat™ Attachment Solution	1.5ml/vial
05-200-1A	MSC NutriStem® XF Medium	500ml
05-201-1U	MSC NutriStem® XF Supplement Mix	3ml
03-043-1A	Saline - Sodium Chloride 0.9% Solution	500ml

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