MSC Expansion Medium

CellCor™ MSC CD AOF

Mesenchymal stem cells (MSCs) currently represent a major portion of the cell therapy market, and can be used in a variety of applications. CellCor™ MSC CD AOF is a serum-free, chemically-defined medium that can be used in primary culture for optimal culture conditions.

- **Animal origin-free CD medium:** AOF-grade product, with high regulatory accessibility for cell therapy markets
- **High Performance:** Can be used in any MSCs from a variety of tissue sources and provides stable culture and excellent cell yields, which is optimized for large-scale culture
- **Low immunogenicity:** Slower senescence compared to 1st and 2nd generation media (FBS(+), Xeno(-)), and less expression of immunogenicity and inflammation-related genes in the cells themselves
- **RUO & GMP grade:** Suitable for MSC research and mass production as well as cell therapy drug manufacturing, and can be used for human- and animal-derived stem cells

FIGURE 1

Comparison of human MSC expansion

Compared to 1st and 2nd generation media, MSCs cultured in CellCor™ MSC CD AOF proliferate faster and more stably, and demonstrate a significantly higher cumulative yield of cells.

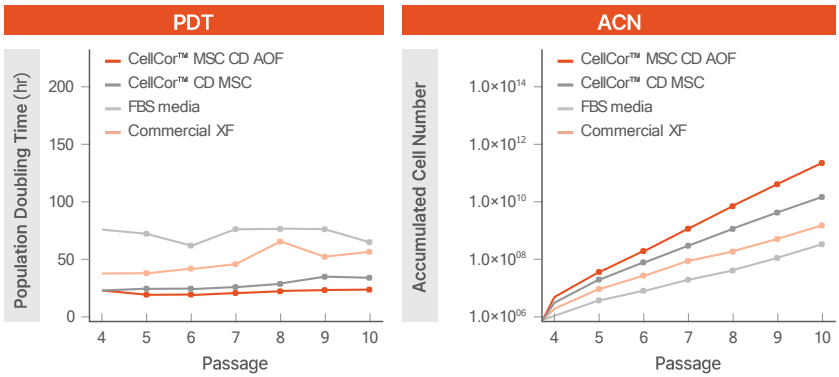
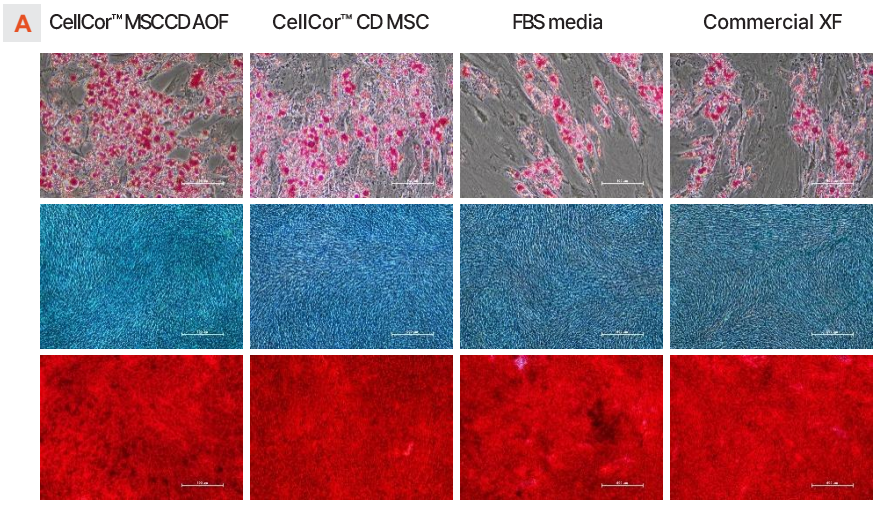


FIGURE 2

Ability of trilineage differentiation and colony forming assay

A | MSCs cultured in CellCor™ MSC CD AOF maintained stable stem cell differentiation ability compared to FBS(+) and commercial media.

B | Colony forming assay was conducted to identify self-renewal ability. Highest self-renewal capacity detected in MSCs cultured in CellCor™ MSC CD AOF



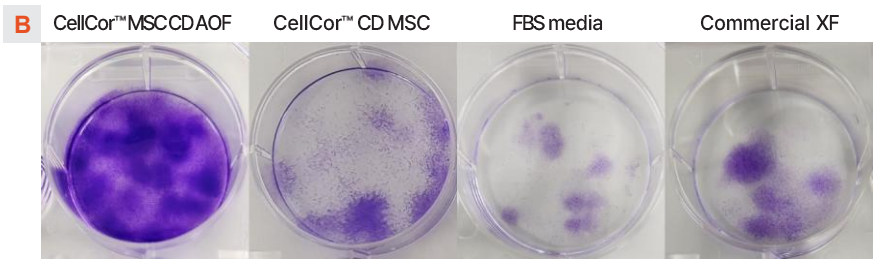


FIGURE 3

Morphology of MSC cultured with CellCor™ MSC CD AOF

CellCor™ MSC CD AOF enables stable culture of MSCs derived from various tissues and preserving their morphological characteristics effectively.

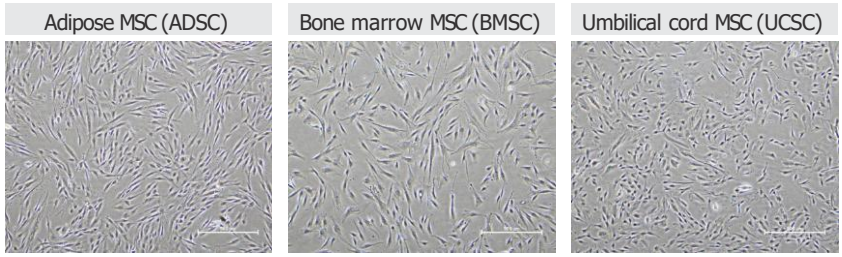
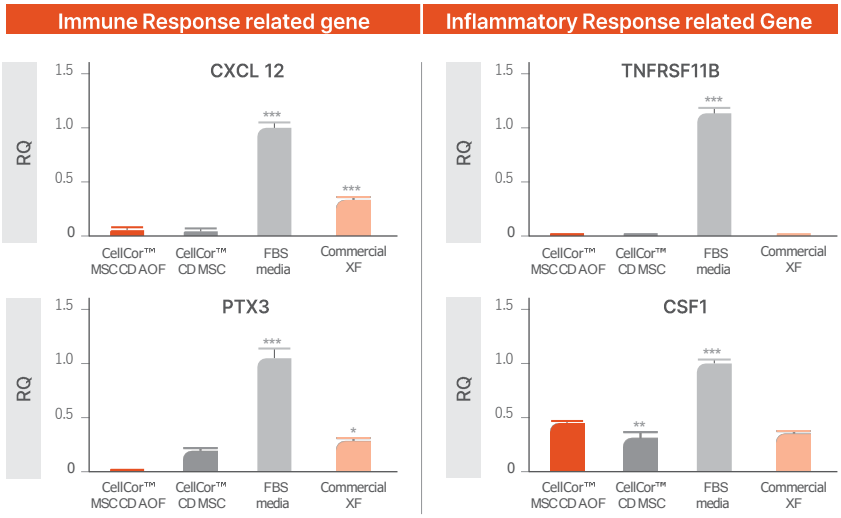


FIGURE 4

Immune and Inflammatory Response related gene expression level

MSCs cultured in CellCor™ MSC CD AOF exhibit lower expression of immune- and inflammation-related genes compared to 1st and 2nd generation media (*p<0.02, ***p<0.001)



Easy-to-culture

CellCor™ MSC CD AOF has been developed as a complete departure from traditional media. It requires no additional supplements and can be used directly, providing convenience for users. It adheres well to most culture vessels, facilitating smooth cell growth regardless of coating. CellCor™ MSC CD AOF reduces the need for medium changes across subsequent cell culture passages, making it more economical in terms of media consumption compared to conventional media.

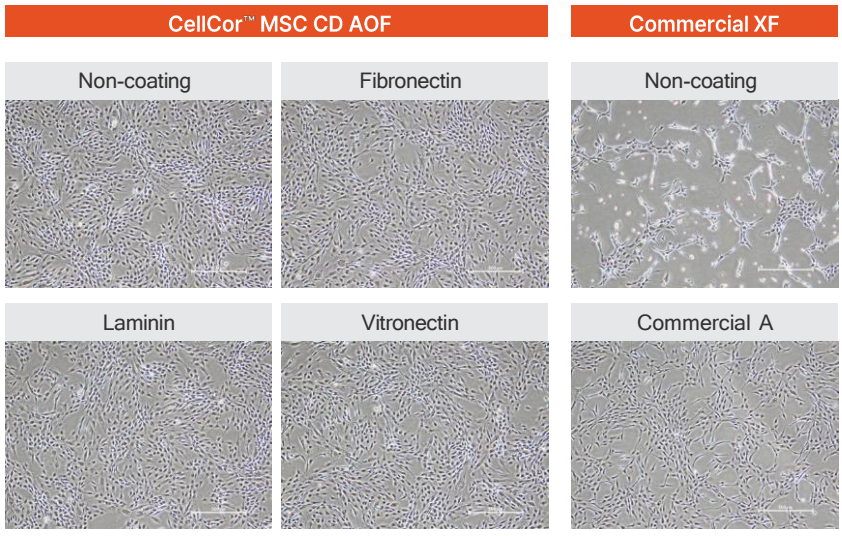


FIGURE 5

Cell Culture Coating Verification Test

MSCs cultured in commercial XF media show variable outcomes depending on the presence of coatings. In contrast, under CellCor™ MSC CD AOF culture conditions, cells demonstrate superior cultivation capabilities across all conditions, independent of coating (*** p <0.001).

