

Certificate of Analysis

Human Mesenchymal Stem Cell Growth Medium

Catalog No. HUXMX-90011 Lot Number: T140416G001

Preparation Date: 2014-04-16

Size: 100 ml

Sterility

Bacterial and Fungal Contamination: Samples are inoculated and cultured in blood agar plate,

thioglycolate broth, tryptocase soy broth and sabouraud dextrose agar.

Specification: No growth must be observed.

Mycoplasma: Samples are tested for mycoplasma contamination using a PCR-based assay and direct

culture.

Specification: Results must be negative.

Endotoxin: Samples are tested for endotoxin contamination with LAL test.

Specification: Results must show a concentration of ≤ 25 EU/ml.

Cell Culture Testing

Each batch of growth medium is tested for its ability to support in vitro growth of human mesenchymal stem cells. When are cultured in growth medium, cells must demonstrate a doubling time of 18-24 h, can proliferate for ≥ 5 passages, and that $\leq 5\%$ of cells exhibit spontaneous differentiation in each passage.

Results:

All specifications have been met.

Jane Chen **QA** Manager May 12, 2014

Jane Chen