【CLAIMS】

【Claim 1】

A medium composition for culturing mesenchymal stem cells, which contains basal medium, L-ascorbic acid 2-phosphate, fetal bovine serum, basic fibroblast growth factor (b-FGF), non-essential amino acids (NEAAs), insulin, N-acetyl-L-cysteine, calcium chloride, and hydrocortisone.

【Claim 2】

The medium composition of claim 1, wherein the basal medium is selected from the group consisting of DMEM-HG, defined keratinocyte-SFM, and a mixture thereof.

【Claim 3】

The medium composition of claim 1, wherein the medium composition contains 0.05-1 mM of ascorbic acid 2-phosphate, 2-20% fetal bovine serum, 1-100 ng/ml of basic fibroblast growth factor (b-FGF), 1-100 μL/ml of non-essential amino acid (NEAA), 0.1-100 μg/ml of insulin, 0.2-20 mM of N-acetyl-L-cysteine, 0.01-1 mM of calcium chloride, and 5 ng/ml-1 μg/ml of hydrocortisone.

【Claim 4】

The medium composition of claim 1 or 3, wherein the non-essential amino acids (NEAAs) consists of glycine, alanine,

asparagines, aspartic acid, glutaminic acid, proline, and serine.

【Claim 5】

The medium composition of claim 4, wherein the non-essential amino acids (NEAAs) consists of 750 mg/L of glycine, 890 mg/L of alanine, 1,320 mg/L of asparagine, 1,330 mg/L of aspartic acid, 1,470 mg/L of glutaminic acid, 1,150 mg/L of proline, and 1,050 mg/L of serine.

【Claim 6】

The medium composition of claim 1, wherein the mesenchymal stem cells is derived from amnion.

【Claim 7】

A method for culturing mesenchymal stem cells, the method comprising culturing the mesenchymal stem cells in the medium composition of any one of claims 1 to 3.

【Claim 8】

The method of claim 7, wherein the mesenchymal stem cells is derived from amnion.

【CLAIMS】

【Claim 1】

A medium composition for culturing mesenchymal stem cells, the medium comprises:

(i) DMEM-P containing DMEM-HG, 0.2mM of L-ascorbic acid 2-phosphate, 10% fetal bovine serum, 10ng/ml of basic fibroblast growth factor (b-FGF), 10 $\mu\ell$/ml of non-essential amino acid (NEAA); and

(ii) KSFM-P containing defined Keratinocyte-SFM, 0.2mM of L-ascorbic acid 2-phosphate, 5μg/ml of insulin, 2mM of N-acetyl-L-cysteine, 0.09mM of calcium chloride, 74ng/ml of hydrocortisone, 5% fetal bovine serum,

wherein the non-essential amino acid (NEAA) consists of 750mg/L of glycine, 890mg/L of L-alanine, 1,320mg/L of L-asparagine, 1,330mg/L of L-aspartic acid, 1,470mg/L of L-glutaminic acid, 1,150mg/L of L-proline, and 1,050mg/L of L-serine, and the volume ratio of DMEM-P : KSFM-P is 2:1, 1: 1 or 1:3.

【Claim 2】

The medium composition of claim 1, wherein the mesenchymal stem cells is derived from amnion.

【Claim 3】

A method for culturing mesenchymal stem cells, the method comprising culturing the mesenchymal stem cells in the medium composition of claim 1.

【Claim 4】

The method of claim 3, wherein the mesenchymal stem cells is derived from amnion.