ABSTRACT

A method of efficiently and conveniently inducing differentiation from bone marrow stromal cells to skeletal muscle cells, which comprises the steps of: (a) the step of adding one or more kinds of substances selected from the group consisting of a cyclic AMP increasing agent, a cAMP analogue, and a cell differentiation stimulating factor to a culture of bone marrow stromal cells, wherein said bone marrow stromal cells are not treated with a demethylating agent, and culturing the cells; (b) the step of introducing a Notch gene and/or a Notch signaling related gene into the cells obtained in the step (a), and culturing the cells to obtain a culture of myoblasts, provided that said culture does not contain the cells introduced with the gene and non-introduced cells; and (c) the step of adding a Notch ligand to the culture of myoblasts obtained in the step (b), and culturing the cells.