ABSTRACT

An object of the present invention is to provide a novel medical application for use in regenerative medicine that uses pluripotent stem cells (Muse cells). The present invention provides a cell preparation for treating myocardial infarction, and particularly serious massive myocardial infarction and heart failure associated therewith, that contains pluripotent stem cells positive for SSEA-3 isolated from biological mesenchymal tissue or cultured mesenchymal cells. The cell preparation of the present invention is based on a cardiac tissue regeneration mechanism by which Muse cells are made to selectively accumulate in damaged myocardial tissue and differentiate into cardiac muscle in that tissue as a result of intravenous administration of Muse cells to a subject presenting with the aforementioned disorders.

Figure 2