ABSTRACT

An object of the present invention is to provide a method for increasing the change in the fluorescent intensity as emitted from potential-sensitive fluorochromes depending on a potential or ionic strength change. Another object of the present invention is to measure the changes in the activity potentials of ES cell- or iPS cell-derived cardiomyocytes that have heretofore been impossible to measure.

The present inventors screened a variety of substances and found that vitamin E has an action for increasing the sensitivity of potential-sensitive fluorochromes whereas cholesterol has an action for enhancing the fluorescent intensity of potential-sensitive fluorochromes. In addition, it has become clear that these substances can be combined in such a way that the sensitivity of a potential-sensitive fluorochrome is increased by vitamin E while at the same time its absolute fluorescent intensity is enhanced by cholesterol.