

ABSTRACT

LITHIUM STIMULATION OF CORD BLOOD STEM CELL PROLIFERATION AND GROWTH FACTOR PRODUCTION

The present invention provides methods for expanding human umbilical cord blood stem cells and methods for stimulating growth factor production by cord blood stem cells using an in vitro cell culture system comprising a lithium salt. The present invention also provides in vivo methods for enhancing the survival and growth of transplanted cord blood stem cells by treating the cells with a lithium salt prior to transplantation. In vivo methods for reducing rejection of transplanted cord blood stem cells by administering a lithium salt after transplantation are also provided.

(Figure 10)