METHOD OF PRODUCING RECOMBINANT TAT-HOXB4H PROTEIN FOR USE AS A STIMULANT OF HEMATOPOIESIS *IN VIVO*

ABSTRACT OF THE INVENTION

The present invention relates to a new and nonobvious method of producing the C-terminal histidine tagged TAT-HOXB4 fusion protein (TAT-HOXB4H), providing unexpected benefits of increased yield and stability to allow for *in vivo* administration of this protein, and pharmaceutical composition comprising an effective ingredient, TAT-HOXB4H, having stimulatory activity on the production of hematopoietic cells. More specifically, recombinant TAT-HOXB4H protein enhances engraftment of bone marrow transplants, hematopoietic reconstruction, bone marrow re-population and number of circulating stem cells, particularly after chemotherapy or irradiation.

Fig. 11