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(54) Title: A METHOD FOR PRESERVATION OF HUMAN HEMATOPOIETIC STEM OR PROGENITOR CELLS

(57) Abstract: Maintenance of quiescent hematopoietic stem and progenitor cells (HSPC) in culture without the addition of exoge-
nous growth factors is an important aspect in clinical hematology. A recent report described the ability of Flt3 receptor-interacting
lectin (FRIL) in the maintenance of cord blood (CB) derived progenitors in vitro. Since FRIL is a mannose binding lectin we exam-
ined the effectiveness of four such lectins of well-characterized specificities on the preservation of HSPC of CB origin. The HSPC
preservation activity of lectins was assessed by in vitro colony forming unit (CFU) and long-term culture initiating cell (LTC-IC)
assays. It was found that all four lectins had a HSPC preservation activity at least up to 30 days in culture without addition of ex-
ogenous growth factors. The results indicate that use of such lectins may provide a cost effective method of HSPC maintenance for
clinical use.



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