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(54) **Title:** METHODS, KITS AND APPARATUS FOR EXPANDING A POPULATION OF CELLS

(57) **Abstract:** The present invention relates to in vitro-methods of expanding a population of cells such as lymphocytes, comprising contacting a sample comprising a population of cells with a multimerization reagent. The multimerization reagent has reversibly immobilized thereon (bound thereto) a first agent that provides a primary activation signal to the cells and optionally, a second agent that provides a co-stimulatory signal. The invention also provides multimerization reagents, kits, arrangements and an apparatus for expanding cells.

