

CD34 (Stem Cell) enumeration

Type of specimen

PARAMETER	RESULTS	UNITS
CD34 Viability		%
Percentage Viable CD34 +		%
CD34+ Viable Absolute Counts		cells/uL

Comment

CD34 expression is seen in immature hematopoietic precursor cells and all hematopoietic colony forming cells in bone marrow & blood including unipotent & pluripotent progenitors. CD34 population is approximately 1-3% of nucleated cells in the bone marrow, 0.001-1% of peripheral blood cells, 0.3-2% of cord blood cells and 0.01-5% in cytapheresis preparations.

Usage

- To determine the optimal timing and to confirm the adequacy of PBSC harvests.
- To determine when to perform bone marrow stem cell transplants.
- To determine whether to continue apheresis.
- To assess bone marrow and cord blood viability.
- The viable CD34+ absolute count is a critical parameter for rapid and sustained engraftment.