Sub-Population 0.06% - ~22.5% of GMPs - 0.005% of total spleen cells. The earliest lineage-restricted progenitor cells committed to B cell development. Express low levels of B220 but not CD19. Express high levels of Ly6d.

Mostly T cells. Derived from oligopotent Lin+/-/lo+/-/hi cells.

NK-restricted precursor cells. Developmental intermediate between pre-NKPs and iNK cells. Express CD314. Do not express CD49b, CD161, and CD335.

Monopotent progenitor cells that exclusively generate mast cells in vitro and in vivo. Found in the intestine and bone marrow, the latter being highly

Megakaryocytic-erythroid 0.05% Generate erythroid colonies. In vivo production of reticulocytes. Low radioprotective capacity. Express receptors for EPO and transferrin.


HSPC

Lineage Potential

Appropriate Frequency in Young White BM (unless Otherwise Noted)

HSPC Markers

CD45+ Sca-1+ c-Kit+ CD34+; CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+; PE+; BrdU+ (E7); Thy-1+ (ST-HSC); CD34+/lo, CD135+/hi; CD117+/hi, CD54+/lo; FITC+/lo, PE+/hi; BrdU-/E7- (IT-HSC); CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+/hi, PE+/hi; BrdU-/E7-/ (ST-HSC);

CD45+ Sca-1+ c-Kit+ CD34+; CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+; PE+; BrdU+ (E7); Thy-1+ (ST-HSC); CD34+/lo, CD135+/hi; CD117+/hi, CD54+/lo; FITC+/lo, PE+/hi; BrdU-/E7- (IT-HSC); CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+/hi, PE+/hi; BrdU-/E7-/ (ST-HSC);

CD45+ Sca-1+ c-Kit+ CD34+; CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+; PE+; BrdU+ (E7); Thy-1+ (ST-HSC); CD34+/lo, CD135+/hi; CD117+/hi, CD54+/lo; FITC+/lo, PE+/hi; BrdU-/E7- (IT-HSC); CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+/hi, PE+/hi; BrdU-/E7-/ (ST-HSC);

CD45+ Sca-1+ c-Kit+ CD34+; CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+; PE+; BrdU+ (E7); Thy-1+ (ST-HSC); CD34+/lo, CD135+/hi; CD117+/hi, CD54+/lo; FITC+/lo, PE+/hi; BrdU-/E7- (IT-HSC); CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+/hi, PE+/hi; BrdU-/E7-/ (ST-HSC);

CD45+ Sca-1+ c-Kit+ CD34+; CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+; PE+; BrdU+ (E7); Thy-1+ (ST-HSC); CD34+/lo, CD135+/hi; CD117+/hi, CD54+/lo; FITC+/lo, PE+/hi; BrdU-/E7- (IT-HSC); CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+/hi, PE+/hi; BrdU-/E7-/ (ST-HSC);

CD45+ Sca-1+ c-Kit+ CD34+; CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+; PE+; BrdU+ (E7); Thy-1+ (ST-HSC); CD34+/lo, CD135+/hi; CD117+/hi, CD54+/lo; FITC+/lo, PE+/hi; BrdU-/E7- (IT-HSC); CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+/hi, PE+/hi; BrdU-/E7-/ (ST-HSC);

CD45+ Sca-1+ c-Kit+ CD34+; CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+; PE+; BrdU+ (E7); Thy-1+ (ST-HSC); CD34+/lo, CD135+/hi; CD117+/hi, CD54+/lo; FITC+/lo, PE+/hi; BrdU-/E7- (IT-HSC); CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+/hi, PE+/hi; BrdU-/E7-/ (ST-HSC);

CD45+ Sca-1+ c-Kit+ CD34+; CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+; PE+; BrdU+ (E7); Thy-1+ (ST-HSC); CD34+/lo, CD135+/hi; CD117+/hi, CD54+/lo; FITC+/lo, PE+/hi; BrdU-/E7- (IT-HSC); CD34+/hi, CD135+/lo; CD117+/lo, CD54+/hi; FITC+/hi, PE+/hi; BrdU-/E7-/ (ST-HSC);