

# Human B Cell Isolation Product Selection

Explore the infographic below to find the correct human B cell isolation product for your application.

## 1. Your Starting Sample

## 2. Cell Separation Platform

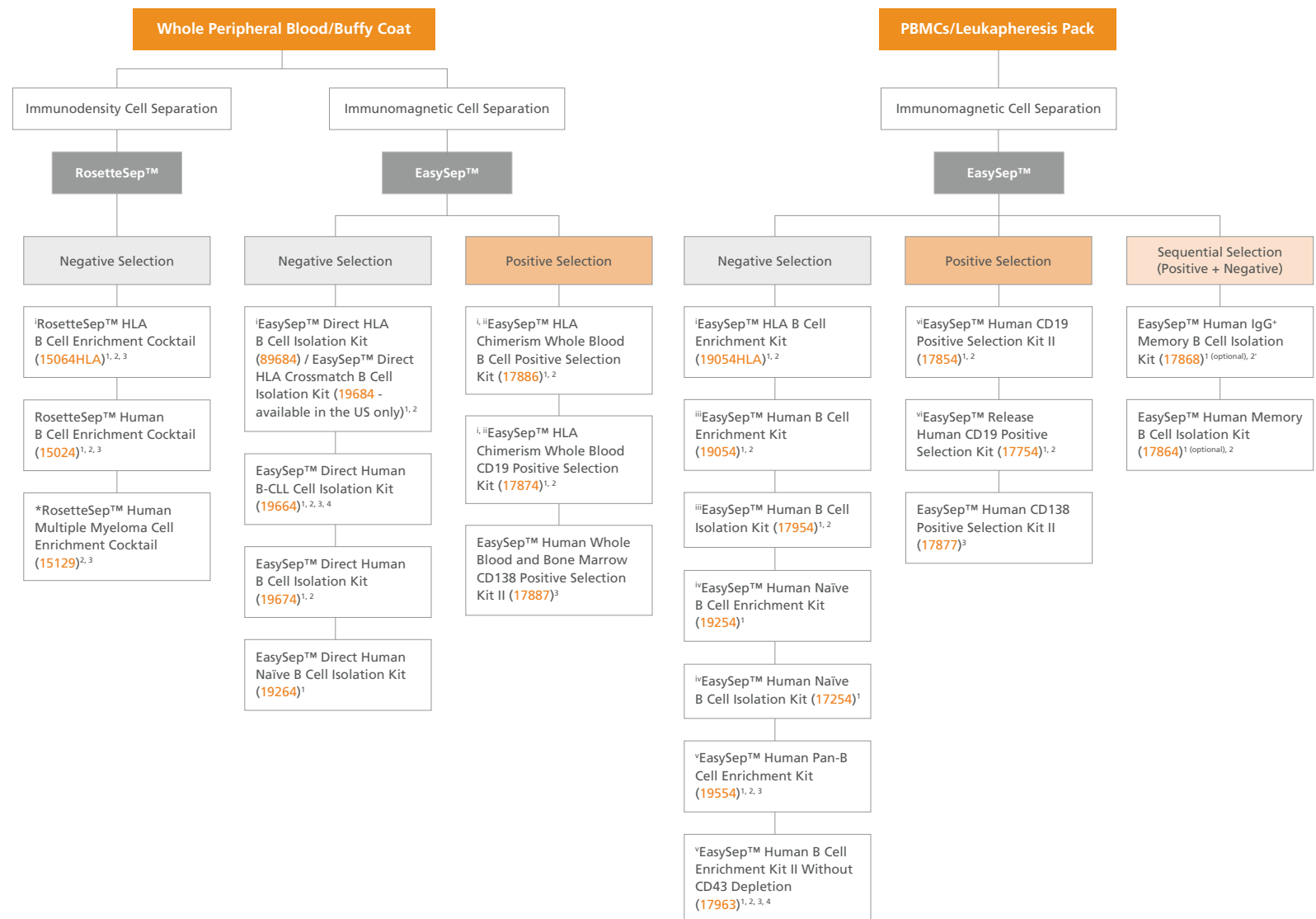
## 3. Product Line

## 4. Selection Method

## 5. Cell Isolation Kits

Catalog #s shown in ( )

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### Legend

Isolated Cell Type(s):

- 1: Naïve B cells (CD19<sup>+</sup>CD20<sup>+</sup>CD27<sup>-</sup>)
- 2: Total Memory B cells (CD19<sup>+</sup>CD20<sup>+</sup>CD27<sup>+</sup>)
- 2<sup>+</sup>: CD19<sup>+</sup>CD20<sup>+</sup>IgG<sup>+</sup>CD27<sup>+</sup> Memory B Cell Subset
- 3: Plasma Cells (CD19<sup>low</sup>CD20<sup>low</sup>CD138<sup>+</sup>)
- 4: B-CLL (CD19<sup>+</sup>CD5<sup>+</sup>) incl. CD43<sup>+</sup>, CD36<sup>+</sup> and/or CD123<sup>+</sup> B Cells

\*Cat #15129: An antibody against CD56 is not included in the cocktail. This kit is recommended to be used only with samples containing malignant plasma cells.

<sup>i</sup>Kits with **HLA designation** have been specifically developed to facilitate cell isolation for labs performing transplant diagnostics.

<sup>ii</sup>Cat #17886 vs. 17874: 17886 targets B cells for positive selection with antibodies recognizing the CD19 and CD20 surface markers, whereas 17874 targets CD19<sup>+</sup> cells for positive selection with an antibody recognizing the CD19 surface marker. The CD19 antigen is present on mature B cells and B cell progenitors, but is lost upon maturation to plasma cells. The antigen CD20 is expressed at all stages of B cell development except on pro-B cells or plasma cells.

<sup>iii</sup>Cat #19054 vs. 17954: 17954 is a faster version of the 19054 kit. 17954 uses Dextran RapidSpheres™ (Cat #50103), which are different from the EasySep™ D Magnetic Particles (Cat #19250) used in 19054.

<sup>iv</sup>Cat #19254 vs. 17254: 17254 is a faster version of the 19254 kit. 17254 uses Dextran RapidSpheres™ (Cat #50103), which are different from the EasySep™ D Magnetic Particles (Cat #19250) used in 19254.

<sup>v</sup>Cat #19554 vs. 17963: To enrich for B cells from peripheral blood or other tissues of patients with B cell leukemia/lymphoma, or other disease states in which B cells may express CD43, CD36, and/or CD123, we recommend using 17963. The use of 19554 might lead to loss of leukemia/lymphoma B cells in certain donors.

<sup>vi</sup>Cat #17854 vs. 17754: 17754 is the particle-release version of 17854. When using the 17754 kit, bound magnetic particles are removed from the EasySep™-isolated CD19<sup>+</sup> cells.

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