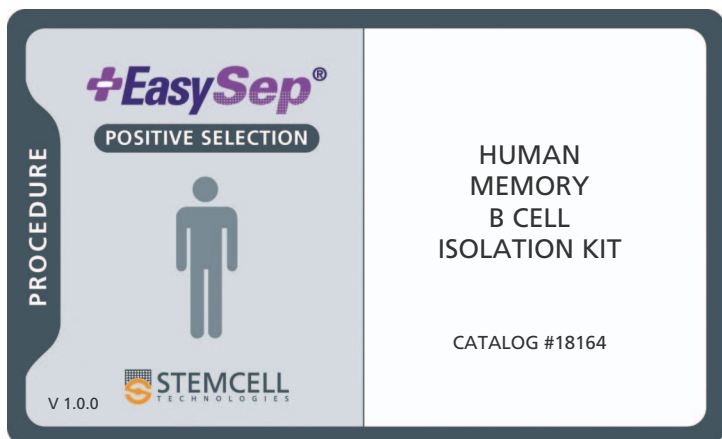




## PRODUCT DESCRIPTION

The EasySep® Human Memory B Cell Isolation Kit is a two-step method designed to isolate CD19<sup>+</sup>CD27<sup>+</sup> B cells from fresh or previously frozen peripheral blood nucleated cells. B cells are first pre-enriched by negative selection using the EasySep® Human Memory B Cell Enrichment Kit (Catalog# 19454). Following pre-enrichment, CD27 positive B cells are selected using the EasySep® Human CD27 Positive Selection Kit (Catalog #18164).

This kit is compatible for use with RoboSep® (Section A, page 1), the Purple EasySep® Magnet (Section B, page 2), and "The Big Easy" Silver EasySep® Magnet (Section C, page 3). An optional CD27<sup>+</sup> depletion to obtain naïve B cells is also provided (Section A, page 1 for RoboSep® and Section D, page 3 for EasySep®).

**PLEASE NOTE:** Two different magnetic particles are provided in the kit – EasySep® D Magnetic Particles (Catalog #19250H) (orange ●) and EasySep® Magnetic Nanoparticles (Catalog #18150H) (brown ●). It is important to follow the procedures outlined in this product information sheet carefully and use the EasySep® D Magnetic Particles (orange ●) only for the Human Memory B Cell Pre-Enrichment and Optional CD27 Depletion to Obtain Naïve B Cells protocols. The EasySep® Magnetic Nanoparticles (brown ●) should only be used for the Human CD27 Positive Selection protocol. Please contact STEMCELL Technologies' Technical Support at techsupport@stemcell.com for more information.

## SECTION A:

### FULLY AUTOMATED PROTOCOL USING ROBOSEP® (CATALOG #20000)

This procedure is used for processing **4.0 mL - 8.0 mL** of sample (up to  $4.0 \times 10^8$  cells). Volumes <4.0 mL will result in lower recovery of memory B cells.

#### I. RoboSep® Human Memory B Cell Pre-Enrichment

1. Prepare a cell suspension at a concentration of  $5 \times 10^7$  cells/mL in RoboSep® Buffer (Catalog #20104) (see Notes and Tips, page 4). Cells must be placed in a 14 mL (17 x 100 mm) polystyrene tube to properly fit into the magnet.

*Falcon™ 14 mL Polystyrene Round-Bottom Tubes (BD Biosciences, Catalog #352057) are recommended.*

2. Select the appropriate RoboSep® protocol:

- "Human Memory B Cell Pre-Enrichment 19454"

If a modified RoboSep® protocol is required, please contact STEMCELL Technologies' Technical Support at techsupport@stemcell.com.

3. Load the RoboSep® carousel as directed by the on-screen prompts. Vortex EasySep® D Magnetic Particles (orange ●) for 30 seconds before loading to ensure that they are in a uniform suspension. When all desired quadrants are loaded, press the green "Run" button. All cell labeling and separation steps will be performed by RoboSep®.
4. When cell separation is complete, remove the tube containing the pre-enriched cells from the RoboSep® carousel. Collect the pre-enriched cells in the 14 mL tube located in the Q2 quadrant.
5. Centrifuge the pre-enriched cells at  $200 \times g$  for 10 minutes, room temperature (15 - 25°C). Carefully aspirate or decant supernatant. Resuspend sample in **250 µL** (for  $\leq 10^6$  start cells) or **400 µL** (for  $>1.0 - 4.0 \times 10^8$  start cells) of RoboSep® Buffer (see Table 1, page 4). The sample is now ready for the CD27 Positive Selection using RoboSep® (Section A II). If desired, CD27<sup>+</sup> naïve B cells may also be obtained (in addition to memory B cells) from this pre-enriched sample using the Optional RoboSep® CD27 Positive Selection protocol and RoboSep® CD27<sup>+</sup> Cell Depletion protocol outlined in Sections A III and A IV.

## II. RoboSep® Human CD27 Positive Selection

1. Select the appropriate RoboSep® protocol:

- "Human CD27 Positive Selection 18164"

If a modified RoboSep® protocol is required, please contact STEMCELL Technologies' Technical Support at techsupport@stemcell.com.

2. Load the RoboSep® carousel as directed by the on-screen prompts. Mix EasySep® Magnetic Nanoparticles (brown ●) before loading to ensure that they are in a uniform suspension by vigorously pipetting up and down more than 5 times. *Vortexing is not recommended.* When all desired quadrants are loaded, press the green "Run" button. All cell labeling and separation steps will be performed by RoboSep®.
3. When cell separation is complete, remove the tube containing the isolated cells from the magnet. Resuspend in an appropriate amount of medium. The positively selected cells are now ready for use.

## III. Optional RoboSep® Human CD27 Positive Selection and Naïve B Cells from the Same Pre-enriched Sample

*Note: The pre-enriched sample from Section A I can also be used to obtain both CD27<sup>+</sup> memory B cells and CD27<sup>+</sup> naïve B cells starting with the alternate CD27 Positive Selection protocol below, followed by Section A IV.*

1. Select the appropriate RoboSep® protocol:

- "Human CD27 Positive Selection Prior to Naïve B cell 18164"

If a modified RoboSep® protocol is required, please contact STEMCELL Technologies' Technical Support at techsupport@stemcell.com.

2. Load the RoboSep® carousel as directed by the on-screen prompts. Mix EasySep® Magnetic Nanoparticles (brown ●) before loading to ensure that they are in a uniform suspension by vigorously pipetting up and down more than 5 times. *Vortexing is not recommended.* When all desired quadrants are loaded, press the green "Run" button. All cell labeling and separation steps will be performed by RoboSep®.
3. When cell separation is complete, remove the tube containing the isolated cells from the magnet. Resuspend in an appropriate amount of medium. These positively selected cells are now ready for use.
4. The supernatant found in the 14 mL tube located in the Q2 quadrant of the carousel (next to the tip rack) can now be used in the RoboSep® CD27<sup>+</sup> Cell Depletion to Obtain Naïve B Cells protocol (Section A IV below).

## IV. Optional RoboSep® CD27<sup>+</sup> Cell Depletion to Obtain Naïve B Cells

*Note: This protocol must be used with the optional "Human CD27 Positive Selection Prior to Naïve B Cell 18164" RoboSep® Protocol above (Section A III).*

1. Take the first wash supernatant from the "Human CD27 Positive Selection Prior to Naïve B Cell 18164" protocol in Section A III. This will be in the 14 mL tube located in the Q2 quadrant of the carousel, next to the tip rack.
2. Centrifuge the supernatant fraction at  $200 \times g$  for 10 minutes, room temperature (15 - 25°C). Carefully aspirate or decant supernatant. Resuspend the sample in **250 µL** of RoboSep® buffer.
3. Select the appropriate RoboSep® protocol:

- "Human Naïve B Cell Negative Post CD27 Positive Selection 18164"

4. Load the RoboSep® carousel as directed by the on-screen prompts. Vortex EasySep® D Magnetic Particles (orange ●) for 30 seconds before loading to ensure that they are in a uniform suspension. When all desired quadrants are loaded, press the green "Run" button. All cell labeling and separation steps will be performed by RoboSep®.
5. When cell separation is complete, remove the tube containing the depleted cell suspension from the RoboSep® carousel. Collect this fraction in the 50 mL tube located in the Q1 quadrant. These naïve B cells are now ready for use.

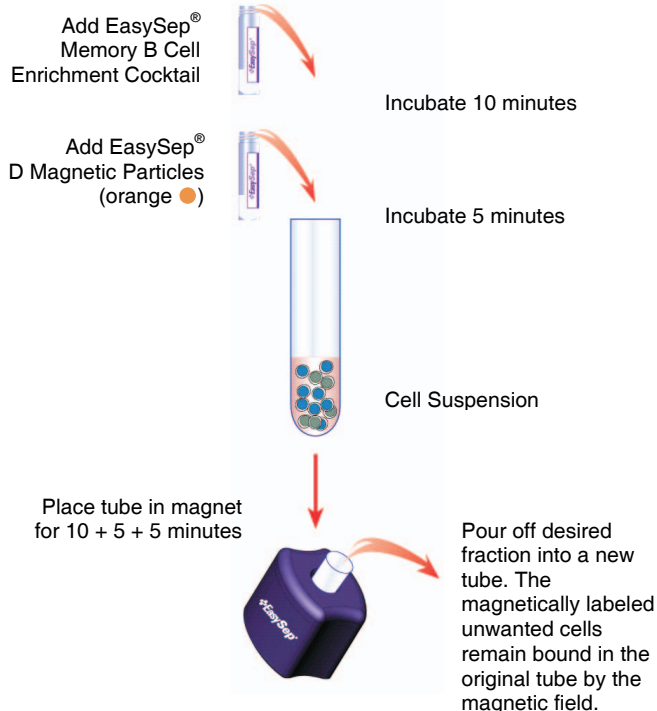
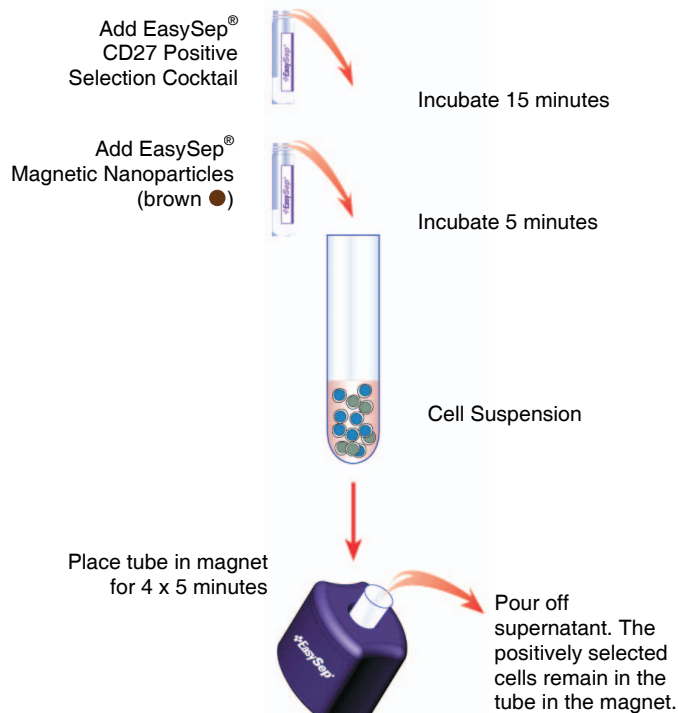
**SECTION B:**
**MANUAL EASYSEP® PROTOCOL USING THE PURPLE EASYSEP® MAGNET (CATALOG #18000)**
**I. EasySep® Human Memory B Cell Pre-Enrichment**

This procedure is used for processing **1.0 - 2.0 mL** of sample (up to  $10^8$  cells).

1. Prepare a cell suspension at a concentration of  $5 \times 10^7$  cells/mL in the recommended medium (see Notes and Tips, page 4). Cells must be placed in a 5 mL (12 x 75 mm) polystyrene tube to properly fit into the Purple EasySep® Magnet.
2. Add EasySep® Human Memory B Cell Enrichment Cocktail at **50 µL/mL** cells (e.g. for 2 mL of cells, add 100 µL of cocktail). Mix well and incubate at room temperature (15 - 25°C) for **10 minutes**.
3. Vortex EasySep® D Magnetic Particles (**orange ●**) for 30 seconds to ensure that they are in a uniform suspension with no visible aggregates.
4. Add the D Magnetic Particles at **75 µL/mL cells** (e.g. for 2 mL of cells, add 150 µL of particles). Mix well and incubate at room temperature (15 - 25°C) for **5 minutes**.
5. Bring the cell suspension up to a **total volume** of 2.5 mL by adding recommended medium. Mix the cells in the tube by gently pipetting up and down 2 - 3 times. Place the tube (without cap) into the magnet. Set aside for **10 minutes**.
6. Pick up the Purple EasySep® Magnet, and in one continuous motion invert the magnet and tube, pouring off the desired fraction into a new 5 mL polystyrene tube. The magnetically labeled unwanted cells will remain bound inside the original tube, held by the magnetic field of the Purple EasySep® Magnet. Leave the magnet and tube inverted for 2 - 3 seconds, then return to upright position. *Do not shake or blot off any drops that may remain hanging from the mouth of the tube.*
7. Remove the original tube from the Purple EasySep® Magnet and place the new tube containing the desired cells into the magnet and set aside for **5 minutes**. Repeat Step 6.
8. Repeat Step 7 once more, for a total of 3 separations in the magnet (**1 x 10 minutes, 2 x 5 minutes**). Centrifuge pre-enriched cells in the new tube for 10 minutes at 200 x g, room temperature (15 - 25°C). Carefully aspirate or decant supernatant. Resuspend sample in **250 µL** of the recommended medium (see Table 1, page 4) and continue with the EasySep® Human CD27 Positive Selection protocol (**Section B II below**).

**II. EasySep® Human CD27 Positive Selection**

1. Add EasySep® Human CD27 Positive Selection Cocktail at **80 µL/mL cells** (e.g. for 250 µL of cells, add 20 µL of cocktail). Mix well and incubate at room temperature (15 - 25°C) for **15 minutes**. (Optional: Add staining antibody, see Notes and Tips, Assessing Purity, page 4)
2. Mix EasySep® Magnetic Nanoparticles (**brown ●**) to ensure that they are in a uniform suspension by pipetting up and down vigorously more than 5 times. *Vortexing is not recommended.* Add the particles at **100 µL/mL cells** (e.g. for 250 µL of cells add 25 µL of nanoparticles). Mix well and incubate at room temperature (15 - 25°C) for **5 minutes**.
3. Bring the cell suspension to a **total volume** of 2.5 mL by adding the recommended medium. Mix the cells in the tube by gently pipetting up and down 2 - 3 times. Place the tube (without cap) into the magnet. Set aside for **5 minutes**.
4. Pick up the Purple EasySep® Magnet, and in one continuous motion invert the magnet and tube, pouring off the supernatant fraction into a new 5 mL polystyrene tube (note: the supernatant contains CD27<sup>+</sup> cells and may be retained and subsequently depleted of all CD27<sup>+</sup> cells: see Optional CD27<sup>+</sup> Cell Depletion to Obtain Naïve B Cells, Section D, page 3). The magnetically labeled CD27<sup>+</sup> B cells will remain inside the tube, held by the magnetic field of the Purple EasySep® Magnet. Leave the magnet and tube in inverted position for 2 - 3 seconds, then return to upright position. *Do not shake or blot off any drops that may remain hanging from the mouth of the tube.*
5. Remove the tube from the magnet and add 2.5 mL of the recommended medium. Mix the cell suspension by gently pipetting up and down 2 - 3 times. Place the tube back in the magnet and set aside for **5 minutes**.
6. Repeat Steps 4 and 5 twice, then Step 4 once more, for a total of 4 x 5 minute separations in the magnet. Remove the tube from the magnet and resuspend cells in an appropriate amount of desired medium. The positively selected cells are now ready for use.

**MANUAL EASYSEP® PROTOCOL DIAGRAM**
**PART I: MEMORY B CELL PRE-ENRICHMENT**

**PART II: CD27 POSITIVE SELECTION**


**SECTION C:****MANUAL EASYSEP® PROTOCOL USING "THE BIG EASY" SILVER EASYSEP® MAGNET (CATALOG #18001)****I. EasySep® Human Memory B Cell Pre-Enrichment**

This procedure is used for processing **1.0 - 8.0 mL** of sample (up to  $4.0 \times 10^8$  cells).

1. Prepare a cell suspension at a concentration of  $5 \times 10^7$  cells/mL in the recommended medium (see Notes and Tips, page 4). Cells must be placed in a 14 mL (12 x 75 mm) polystyrene tube to properly fit into the Silver EasySep® Magnet.

*Falcon™ 14 mL Polystyrene Round-Bottom Tubes (BD Biosciences, Catalog #352057) are recommended.*

2. Add EasySep® Human Memory B Cell Enrichment Cocktail at **50 µL/mL** cells (e.g. for 2 mL of cells, add 100 µL of cocktail). Mix well and incubate at room temperature (15 - 25°C) for **10 minutes**.
3. Vortex EasySep® D Magnetic Particles (**orange ●**) for 30 seconds to ensure that they are in a uniform suspension with no visible aggregates.
4. Add the D Magnetic Particles at **75 µL/mL cells** (e.g. for 2 mL of cells, add 150 µL of particles). Mix well and incubate at room temperature (15 - 25°C) for **5 minutes**.
5. Bring the cell suspension up to a **total volume** of 5 mL (for  $\leq 10^8$  cells) or to 10 mL (for more than 2 mL, e.g.  $>1.0 - 4.0 \times 10^8$  cells) by adding recommended medium. Mix the cells in the tube by gently pipetting up and down 2 - 3 times. Place the tube (without cap) into the magnet. Set aside for **10 minutes**.
6. Pick up the Silver EasySep® Magnet, and in one continuous motion invert the magnet and tube, pouring off the desired fraction into a new 14 mL polystyrene tube. The magnetically labeled unwanted cells will remain bound inside the original tube, held by the magnetic field of the Silver EasySep® Magnet. Leave the magnet and tube inverted for 2 - 3 seconds, then return to upright position. *Do not shake or blot off any drops that may remain hanging from the mouth of the tube.*
7. Remove the original tube from the Silver EasySep® Magnet and place the new tube containing the desired cells into the magnet and set aside for **5 minutes**. Repeat Step 6.
8. Repeat Step 7 once more, for a total 3 separations in the magnet (**1 x 10 minutes, 2 x 5 minutes**). Centrifuge pre-enriched cells in the new tube for **10 minutes** at 200 x g, room temperature (15 - 25°C). Carefully aspirate or decant supernatant. Resuspend sample in **250 µL** (for  $\leq 10^8$  start cells) or **400 µL** (for  $>1.0 - 4.0 \times 10^8$  start cells) of the recommended medium (see Table 1, page 4) and continue with the EasySep® Human CD27 Positive Selection protocol (**Section C II below**).

**II. EasySep® Human CD27 Positive Selection**

1. Add EasySep® Human CD27 Positive Selection Cocktail at **80 µL/mL cells** (e.g. for 250 µL of cells, add 20 µL of cocktail). Mix well and incubate at room temperature (15 - 25°C) for **15 minutes**. (Optional: Add staining antibody, see Notes and Tips, Assessing Purity, page 4)
2. Mix EasySep® Magnetic Nanoparticles (**brown ●**) to ensure that they are in a uniform suspension by pipetting up and down vigorously more than 5 times. *Vortexing is not recommended.* Add the particles at **100 µL/mL cells** (e.g. for 250 µL of cells add 25 µL of nanoparticles). Mix well and incubate at room temperature (15 - 25°C) for **5 minutes**.

*Note: EasySep® Positive Selection Cocktail and Nanoparticles may be provided in excess.*

3. Bring the cell suspension to a **total volume** of 2.5 mL by adding the recommended medium. Mix the cells in the tube by gently pipetting up and down 2 - 3 times. Place the tube (without cap) into the magnet. Set aside for **5 minutes**.
4. Pick up the Silver EasySep® Magnet, and in one continuous motion invert the magnet and tube, pouring off the supernatant fraction into a new 14 mL polystyrene tube (note: the supernatant contains CD27<sup>+</sup> cells and may be retained and subsequently depleted of all CD27<sup>+</sup> cells: see Optional CD27<sup>+</sup> Cell Depletion to Obtain Naïve B Cells, Section D, page 3). The magnetically labeled CD27<sup>+</sup> B cells will remain inside the tube, held by the magnetic field of the Silver EasySep® Magnet. Leave the magnet and tube in inverted position for 2 - 3 seconds, then return to upright position. *Do not shake or blot off any drops that may remain hanging from the mouth of the tube.*
5. Remove the tube from the magnet and add 2.5 mL of the recommended medium. Mix the cell suspension by gently pipetting up and down 2 - 3 times. Place the tube back in the magnet and set aside for **5 minutes**.
6. Repeat Steps 4 and 5 twice, then Step 4 once more, for a total of 4 x 5 minute separations in the magnet. Remove the tube from the magnet and resuspend cells in an appropriate amount of desired medium. The positively selected cells are now ready for use.

**SECTION D:****OPTIONAL MANUAL CD27<sup>+</sup> CELL DEPLETION TO OBTAIN NAÏVE B CELLS**

Following EasySep® CD27 Positive Selection (Sections B II or C II), the negative fraction can be further depleted of CD27<sup>+</sup> cells to obtain CD27<sup>+</sup> naïve B cells. The procedure is compatible with the EasySep® Purple Magnet (Catalog #18000) or "The Big Easy" EasySep® Magnet (Catalog #18001).

**I. High Purity Protocol to Obtain Naïve B Cells**

1. Take the first wash supernatant fraction from the CD27 Positive Selection protocol (Section B II or C II, Step 4). Centrifuge at 200 x g for **10 minutes**, room temperature (15 - 25°C). Carefully aspirate or decant supernatant. Resuspend the sample in **250 µL** of recommended medium.
2. Add EasySep® CD27 Positive Selection Cocktail at **120 µL/mL cells** (e.g. for 250 µL of cells, add 30 µL of cocktail). Mix well and incubate at room temperature (15 - 25°C) for **10 minutes**.
3. Vortex EasySep® D Magnetic Particles (**orange ●**) for 30 seconds to ensure that they are in a uniform suspension with no visible aggregates. Add D Magnetic Particles at **100 µL/mL cells** (e.g. for 250 µL of cells, add 25 µL of particles). Mix well and incubate at room temperature (15 - 25°C) for **5 minutes**.
4. Bring the cell suspension to a **total volume** of 2.5 mL by adding recommended medium. Mix the cells in the tube by gently pipetting up and down 2 - 3 times. Place the tube (without cap) into the magnet. Set aside for **10 minutes**.
5. Pick up the EasySep® Magnet, and in one continuous motion, invert the magnet and tube, pouring off the supernatant fraction into a new polystyrene tube. Leave the magnet and tube in inverted position for 2 - 3 seconds, then return to upright position. *Do not shake or blot off any drops that may remain hanging from the mouth of the tube.* The depleted cell suspension in the new tube is now ready for use.

**II. Alternative High Recovery Protocol to Obtain Naïve B Cells**

1. Place the tube containing the first wash supernatant fraction from the CD27 Positive Selection protocol (Section B II or C II, Step 4) into magnet. Set aside for **10 minutes**.
2. Pick up the EasySep® Magnet, and in one continuous motion invert the magnet and tube, pouring off the desired fraction into a new polystyrene tube. The magnetically labeled unwanted cells will remain bound inside the original tube, held by the magnetic field of the EasySep® Magnet. Leave the magnet and the tube in inverted position for 2 - 3 seconds, then return to upright position. *Do not shake or blot off any drops that may remain hanging from the mouth of the tube.*
3. Remove the first tube from the EasySep® Magnet and place the new tube containing the desired cells into the magnet and set aside for **10 minutes**.
4. Repeat Step 2 for a total of 2 x 10 minute separations in the magnet. The depleted cell suspension in the new tube is now ready for use.

## Components:

- EasySep® Human Memory B Cell Enrichment Cocktail
- EasySep® D Magnetic Particles (orange ●)
- EasySep® Human CD27 Positive Selection Cocktail
- EasySep® Nanoparticles (brown ●)

2 x 1.0 mL  
5 x 1.0 mL  
2 x 1.0 mL  
1.0 mL



POSITIVE SELECTION

**REQUIRED EQUIPMENT:**

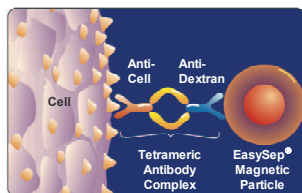
EasySep® Magnet (Catalog #18000), or "The Big Easy" EasySep® Magnet (Catalog #18001), or RoboSep® (Catalog #20000).

**PRODUCT DESCRIPTION AND APPLICATIONS:**

EasySep® Human Memory B Cell Isolation Kit (Catalog #18164) is a two-step isolation kit designed to enrich memory B cells (CD19<sup>+</sup>CD27<sup>+</sup>) from fresh or previously frozen peripheral blood mononuclear cells (PBMC) or leukapheresis samples. Naïve B cells can also be obtained by further depletion of CD27<sup>+</sup> cells.

**EASYSEP® LABELING OF HUMAN CELLS:**

Target cells are specifically labeled with dextran-coated magnetic particles using bispecific Tetrameric Antibody Complexes (TAC). These complexes recognize both dextran and the target cell surface antigen (Figure 1). The small size of the magnetic dextran iron particles allows for efficient binding to the TAC-labeled cells, and does not interfere with subsequent FACS analysis. Magnetically labeled cells are then separated from unlabeled cells using the EasySep® procedure.

**Figure 1.**

Schematic Drawing of EasySep® TAC Magnetic Labeling of Human Cells.

**NOTES AND TIPS:****PREPARING THE CELL SUSPENSION****FROM WHOLE PERIPHERAL BLOOD**

Prepare a mononuclear cell suspension from whole peripheral blood by Ficoll-Paque™ PLUS density separation (Catalog #07957). For previously frozen mononuclear cells, we recommend incubating the cells with DNase I (Catalog #07900) at a concentration of 100 µg/mL for at least 15 minutes at room temperature (15 - 25°C) prior to labeling and separation. Filter clumpy suspensions through a 30 µm mesh nylon strainer for optimal results.

**FROM PERIPHERAL BLOOD APHERESIS (LEUKOPAK)**

If working with large volumes (>150 mL), concentrate Leukopak cells first by centrifuging at 500 x g for 10 minutes, removing the supernatant, and resuspending the cells in 1/10th of the original Leukopak volume in recommended medium (e.g. for 300 mL of cells, resuspend in 30 mL of recommended medium). For small volumes (150 mL or less), add the Ammonium Chloride solution directly to the cell suspension.

1. Add an equal volume of Ammonium Chloride solution to the Leukopak suspension (e.g. for 5 mL of Leukopak suspension, add 5 mL Ammonium Chloride solution).
2. Incubate 15 minutes on ice.
3. Centrifuge at 500 x g for 10 minutes at room temperature (15 - 25°C). Remove the supernatant.
4. Wash the cells by topping up the tube with the recommended medium. Centrifuge the cells at 150 x g for 10 minutes at room temperature (15 - 25°C) with the brake off. Carefully remove the supernatant.
5. Repeat the wash step one or more times until most of the platelets have been removed (indicated by a clear supernatant).
6. Resuspend cells at recommended cell concentration, in the recommended medium.

**TABLE 1. RECOMMENDED RESUSPENSION VOLUMES FOR CD27 POSITIVE SELECTION PROTOCOL**

| MAGNET              | B CELL ENRICHMENT                         |                    | CD27 <sup>+</sup> SELECTION |
|---------------------|-------------------------------------------|--------------------|-----------------------------|
|                     | STARTING CELL NUMBER                      | VOLUME             | RESUSPENSION VOLUME         |
| Purple              | $\leq 1 \times 10^8$                      | $\leq 2$ mL        | 250 µL                      |
| Silver/<br>RoboSep® | $\leq 1 \times 10^8$                      | $\leq 2$ mL        | 250 µL                      |
|                     | $> 1 \times 10^8$ up to $4.0 \times 10^8$ | $> 2$ up to 8.0 mL | 400 µL                      |

**RECOMMENDED MEDIUM.** The recommended medium is RoboSep® Buffer (Catalog #20104), or Phosphate Buffered Saline (PBS) + 2% FBS (Catalog #07905) with 1 mM EDTA added. Medium should be Ca<sup>++</sup> and Mg<sup>++</sup> free.

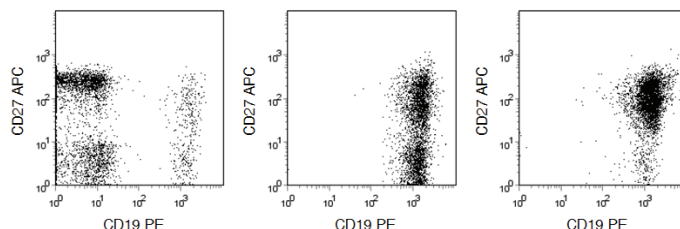
**ASSESSING PURITY.** The purity of B cells can be measured by flow cytometry after staining with a fluorochrome-conjugated antibody against CD19 (e.g. FITC anti-CD19, Catalog #10409).

The CD27 positive selection cocktail may block some antibody clones used to assess purity by flow cytometry. To assess purity we recommend one of the following methods:

1. Labeled antibodies can be added at the same time as the cocktail: Add the fluorochrome-conjugated CD27 antibody (clone: L128) at a concentration of 0.1 - 0.2 µg/mL immediately before adding the cocktail to provide a strong detection signal without affecting separation performance. This method labels the positive cells in the entire sample.
2. Label sample after separation using the CD27 clone: L128.

**TYPICAL EASYSEP® HUMAN MEMORY B CELL SELECTION PROFILE:**

Start: 5.9% CD19<sup>+</sup>CD27<sup>+</sup> Cells      Enriched: 99.9% CD19<sup>+</sup> B Cells      Positive Selection: 92.2% CD19<sup>+</sup>CD27<sup>+</sup> B cells



Starting with nucleated cells, the CD19<sup>+</sup>CD27<sup>+</sup> cell content of the enriched fraction typically ranges from 85 - 95%.

**COMPONENT DESCRIPTIONS:****EASYSEP® HUMAN MEMORY B CELL ENRICHMENT COCKTAIL      CODE #19454C**

This cocktail contains a combination of monoclonal antibodies purified from hybridoma culture supernatant by affinity chromatography using Protein A or Protein G Sepharose. These antibodies are bound in bispecific Tetrameric Antibody Complexes (TAC) which are directed against cell surface antigens on human blood cells (CD2, CD3, CD14, CD16, CD36, CD43, CD56, CD66b, glycophorin A) and dextran. The mouse monoclonal antibody subclass is IgG<sub>1</sub>. It should be noted that this product is a biological reagent, and as such cannot be completely characterized or quantified. Some variability is unavoidable.

**EASYSEP® D MAGNETIC PARTICLES (orange ●)      CODE #19250H**

A suspension of magnetic dextran iron particles in TRIS buffer.

**EASYSEP® HUMAN CD27 POSITIVE SELECTION COCKTAIL      CODE #18164C**

This cocktail contains a combination of monoclonal antibodies purified from hybridoma culture supernatant by affinity chromatography using Protein A or Protein G Sepharose. These antibodies are bound in bispecific Tetrameric Antibody Complexes (TAC) which are directed against CD27 and dextran. The mouse monoclonal antibody subclass is IgG<sub>1</sub>. This cocktail is supplied in PBS and contains an antibody against human Fc receptor. It should be noted that this product is a biological reagent, and as such cannot be completely characterized or quantified. Some variability is unavoidable.

**EASYSEP® MAGNETIC NANOPARTICLES (brown ●)      CODE #18150H**

A suspension of magnetic dextran iron particles in water.

**STABILITY AND STORAGE:**

**EASYSEP® HUMAN MEMORY B CELL ENRICHMENT COCKTAIL**  
**EASYSEP® D MAGNETIC PARTICLES**  
**EASYSEP® HUMAN CD27 POSITIVE SELECTION COCKTAIL**  
**EASYSEP® MAGNETIC NANOPARTICLES**

Product stable at 2 - 8°C until expiry date as indicated on label. Contents have been sterility tested. Do not freeze this product. This product may be shipped at room temperature (15 - 25°C), and should be refrigerated upon receipt.

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