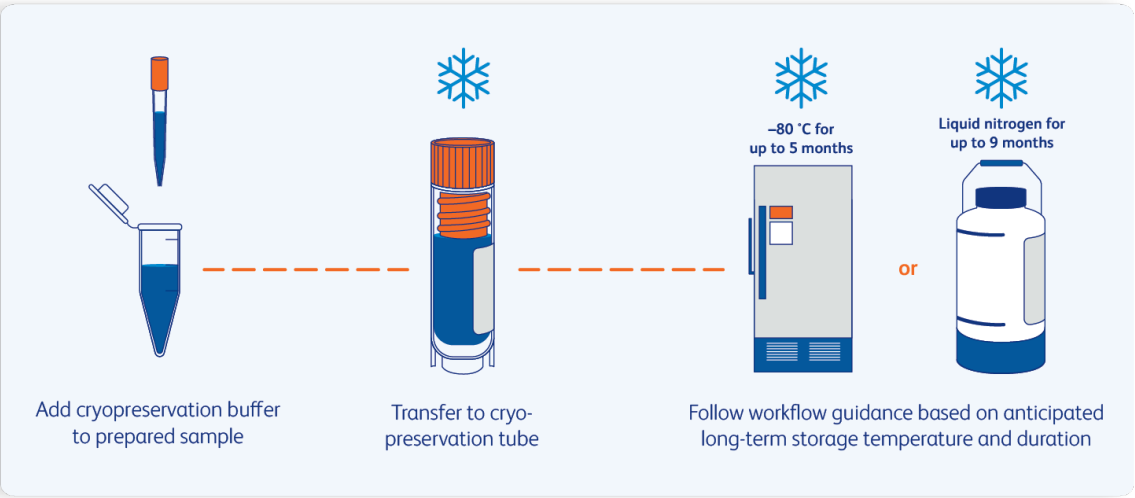
Long-term sample storage with the BD OMICS-Guard™ CRYO Preservation Buffer

Workflow overview



Description

The BD OMICS-Guard™ CRYO Preservation Buffer (Cat. No. 574172 or 574173) is a specialized cryopreservation reagent designed to maintain high-quality mRNA, protein epitopes and DNA (ATAC-seq) of cells within bulk tissue, whole blood and single-cell suspension biological sample formats without cross-linking. Samples can be stored at –80 °C for up to 5 months or in vapor phase liquid nitrogen (below –120 °C) for up to 9 months.*
*Longer-term storage in vapor phase liquid nitrogen is anticipated to be feasible, although it has not been fully validated.

Note: Isolated nuclei are not supported for long-term storage in BD OMICS-Guard™ CRYO Preservation Buffer.

- Preserved samples with whole cells are compatible with the following single-cell workflows post-storage in the BD OMICS-Guard™ CRYO Preservation Buffer:
  - **BD OMICS-One™ WTA Next Assay**
  - **BD Rhapsody™ Multiomic ATAC-Seq Assay**
  - **BD Rhapsody™ TCR/BCR Next Assay**
  - **BD OMICS-One™ Protein Panels**

- BD OMICS-Guard™ CRYO Preservation Buffer supports only post-storage cell-surface protein profiling via BD® AbSeq Antibody-Oligo Reagents and sample multiplexing with the BD® Single-Cell Multiplexing Kit. When staining with BD AbSeq® Antibody-Oligo Reagents after cryopreservation, the BD® AbSeq Enhancer (Cat. No. 570750) must be included to obtain optimal signal recovery.

- BD OMICS-Guard™ CRYO Preservation Buffer is compatible with flow cytometry experiments. Samples preserved in the buffer can be thawed and stained with fluorophore-conjugated antibodies. However, it is recommended that the antibody markers be evaluated individually for potential impacts on antibody binding prior to the experiment.

Protocol and reagent notes

Contamination prevention: Reagent is bottled under aseptic conditions; contains no biocides. Upon first opening, prepare single-use aliquots using aseptic technique in a biosafety cabinet. Perform all subsequent handling in a biosafety cabinet to avoid contamination from repeated container entry. Contamination may impact buffer performance.

Pre-cryopreservation hold: If immediate freezing is not possible, cell suspensions or bulk tissue may first be held in BD OMICS-Guard™ Sample Preservation Buffer (Cat. No. 570911 or 570908) at 4 °C for up to 72 h. BD OMICS-Guard™ CRYO Preservation Buffer is not validated for 4 °C storage. Transfer to the cryopreservation buffer via a simple buffer exchange by first spinning at 800 x *g* for 5 min and discarding the supernatant before adding the BD OMICS-Guard™ CRYO Preservation Buffer for long-term freezing.

Before you begin

The table below includes reagents required for the workflow, as well as reagents that may be needed depending on the sample type and preservation protocol.

Item	Supplier	Cat. No./Part No.	Relevant Assay
BD OMICS-Guard™ CRYO Preservation Buffer	BD Biosciences	574173	All
Cryopreservation Vials/Tubes*	Corning	430659	All
RPMI Medium 1640	Gibco	11875-093	All
Gibco Fetal Bovine Serum (FBS)	Thermo Fisher Scientific	A5670801	All
BD Pharmingen™ Stain Buffer (FBS)	BD Biosciences	554656	CITE-seq assays
BD Pharmingen™ Human BD Fc Block™	BD Biosciences	564219	CITE-seq assays
BD® AbSeq Enhancer kit	BD Biosciences	570750	CITE-seq assays
Mr. Frosty™ Container*	Thermo Fisher Scientific	5100-0001	All
SepMate™-15 Tubes	STEMCELL Technologies	85415	Whole blood preservation
SepMate™-50 Tubes	STEMCELL Technologies	85460	Whole blood preservation
BD Pharm Lyse™ Lysing Buffer	BD Biosciences	555899	Whole blood or tissue preservation assays
BD Horizon™ Dri Tumor & Tissue Dissociation Reagent (TTDR)	BD Biosciences	661563	Tissue preservation assays

*Or equivalent

Recommended assay procedure

Follow the correct protocol for your sample type. Protocols are partitioned into three sections:

I. Single-cell suspension assays
II. Whole blood assays
III. Bulk tissue assays

Note: For all centrifugation steps, a swinging bucket is recommended.

I. Single-cell suspension

Recommended usage: For optimal performance, resuspend 100,000 to 20,000,000 cells per 1 mL of BD OMICS-Guard™ CRYO Preservation Buffer. A minimum of 1 mL of buffer and 100,000 cells input is recommended. A lower number of cells can be used, though it has not been fully validated.

Cryopreservation protocol

1. Pellet single cells or dissociated cells by centrifuging at 400 × *g* for 5 min.
2. Carefully aspirate and discard the supernatant.
3. Resuspend the cells in BD OMICS-Guard™ CRYO Preservation Buffer at a concentration of 100,000 to 20,000,000 cells per 1 mL of buffer. We recommend a minimum of 1 mL of buffer and a minimum of 100,000 cells input.
4. Transfer the suspension to cryopreservation tubes. Place tubes in a pre-cooled (2–8 °C) controlled-rate freezing container e.g., Thermo Fisher Scientific Mr. Frosty™ Container (Cat. No. 5100-0001), prepared according to the manufacturer's instructions.

5. Promptly place the freezing container in a –80 °C freezer overnight. Samples may remain at –80 °C for up to 5 months or be transferred to vapor phase liquid nitrogen (below –120 °C) for storage up to 9 months.

Thawing protocol

1. Prepare culture media for thawing. We recommend using complete RPMI media, which is RPMI 1640 supplemented with 10% FBS (v/v). Note: alternative cell culture media may be used as appropriate for the specific sample type.
    a. Thawing media formulation = complete RPMI media or [RPMI1640 + 10% FBS (v/v)]
2. Pre-warm the complete media to 37 °C and hold at temperature until use.
3. Remove the cryovial from storage and thaw rapidly in a 37 °C water bath for 1–2 min or until only small ice crystals remain.
4. Add 1 mL of warm complete media to the 1 mL cell suspension (2 mL total). Gently pipette-mix five times.
5. Transfer the 2-mL cell suspension dropwise into a 15-mL conical tube containing 8 mL of warm complete media.
6. Mix by gently inverting the tube.
7. Centrifuge at 400 × *g* for 5 minutes.
   Note: Steps 8–10 (second wash) may be omitted when cell input is limited (e.g., <500,000 cells), though this may result in residual debris.
    a. Optional: Skip to step 12 and resuspend directly in the buffer required for downstream applications.
8. Aspirate the supernatant without disturbing the cell pellet.
9. Resuspend in 1 mL of warm complete media for an additional wash (see steps 10–12 below).
10. Centrifuge at 400 x *g* for 5 min.
11. Aspirate the supernatant without disturbing the pellet.
12. Resuspend the cell pellet in the appropriate buffer for downstream applications.

II. Whole blood

Important: Granulocytes do not survive freeze-thaw when stored in BD OMICS-Guard™ CRYO Preservation Buffer. Use BD OMICS-Guard™ Sample Preservation Buffer (Cat. No. 570911) instead for short-term preservation (up to 72 h at 4 °C).

Cryopreservation protocol

1. Collect whole blood using EDTA-anticoagulant tubes. (EDTA anticoagulant has been validated for use, though other alternative anticoagulants may be feasible. It is recommended to test alternative approaches before use.)
2. In a separate tube, mix 1 part blood to 3 parts BD OMICS-Guard™ CRYO Preservation Buffer and mix by inverting 10 times. Minimum volume is 200 µL.
3. Transfer the suspension to cryopreservation tubes. Place tubes in a pre-cooled (2–8 °C) controlled-rate freezing container, e.g., Thermo Fisher Scientific Mr. Frosty™ Container (Cat. No. 5100-0001), prepared according to the manufacturer's instructions.
4. Place the cell freezing container in a –80 °C freezer overnight (samples may remain at –80 °C for up to 9 days).
5. Transfer to vapor phase liquid nitrogen (below –120 °C) for long-term storage.

Thawing protocol

Note: Red blood cell (RBC) removal is recommended prior to PBMC isolation. We have validated the use of BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899) for this purpose; however, alternative approaches, such as magnetic RBC depletion, are also expected to be compatible.

1. Prepare complete RPMI media (complete media) for thawing. We recommend using complete RPMI media, which is RPMI1640 supplemented with 10% FBS (v/v).
   Note: alternative cell culture media may be used as appropriate for the specific sample type.
2. Prepare a 1X BD Pharm Lyse™ Lysing Buffer mixture per the recommended product instructions and equilibrate at room temperature. Hold at room temperature until use.
3. Prepare a stock of phosphate-buffered saline (PBS) supplemented with 2% FBS used for various wash steps in this workflow.
   Note: Wash buffers containing azide or biocides have not been validated for use.
4. Pre-warm the complete media to 37 °C and hold at that temperature until use.
5. Remove the cryovial from storage and thaw rapidly in a 37 °C water bath for 1–2 min or until only small ice

crystals remain.
6. Transfer thawed samples to the fresh pre-warmed complete media from above. Ensure the ratio of whole blood to complete media is at least 1 part blood to 9 parts medium to ensure traces of storage buffer are sufficiently removed.
7. Gently invert 5 times to mix.
8. Centrifuge at 200 × *g* for 10 min at 4 °C.
9. Aspirate the supernatant without disturbing the pellet.
10. Add 10 mL of 1X BD Pharm Lyse™ Lysing Buffer per 1 mL of original whole blood equivalent.
11. Incubate on ice for 10 min.
12. Centrifuge at 400 × *g* for 5 min at 4 °C.
13. Resuspend the pellet in PBS + 2% FBS using an appropriate volume to isolate PBMCs.
    Note: Wash buffers containing azide or biocides have not been validated for use.
14. For optimal PBMC recovery, STEMCELL SepMate™ PBMC Isolation Tubes (Cat. No. 85415 or 85460) are recommended. Follow the manufacturer's protocol.

III. Bulk tissue

Recommended usage: Prior to freezing, section bulk tissue into approximately 1–5 small pieces (≤50 mg each piece) per 1 mL of BD OMICS-Guard™ CRYO Preservation Buffer. When storing multiple pieces in a single vial, keep them small to maximize buffer contact and surface area. Glass Petri dishes are recommended for tissue sectioning.
Note: Storage of tissue pieces ≥50mg or ≥250mg total mass per vial has not been experimentally validated.

Cryopreservation protocol

1. Section tissue to the recommended amount as stated above and immediately immerse pieces in BD OMICS-Guard™ CRYO Preservation Buffer. Alternatively, tissue may be held in BD OMICS-Guard™ Sample Preservation Buffer (Cat. No. 570911) at 4 °C for up to 72 h before transferring to BD OMICS-Guard™ CRYO Preservation Buffer for long-term storage.
2. Transfer the tissue piece(s) to cryopreservation tubes. Place tubes in a pre-cooled (2–8 °C) controlled-rate freezing container, e.g., Thermo Fisher Scientific Mr. Frosty™ Container (Cat. No. 5100-0001), prepared according to the manufacturer's instructions.
3. Place the freezing container in a –80 °C freezer overnight, then transfer to vapor phase liquid nitrogen (below –120 °C) for long-term storage.

Thawing protocol

1. Prepare culture media for thawing. We recommend using complete RPMI media, which is RPMI1640 supplemented with 10% FBS (v/v). Note: alternative cell culture media may be used as appropriate for the specific sample type.
2. Pre-warm the thawing media to 37 °C and hold at temperature until use.
3. Remove the cryovial from storage and thaw rapidly in a 37 °C water bath for 1–2 minutes or until only small ice crystals remain.
4. Transfer the entire contents of the cryopreservation tube into a 15-mL Falcon tube containing 10 mL of warm complete media.
5. Centrifuge at 400 × *g* for 5 min at room temperature.
6. Aspirate the supernatant without disturbing the tissue piece(s).
7. Proceed with tissue dissociation using the BD Horizon™ Dri Tumor & Tissue Dissociation Reagent (TTDR) (Cat. No. 661563).
   Note: Alternative tissue dissociation reagents and protocols may be used depending on the tissue type and application.
8. We recommend using glass Petri dishes for the dissociation step.

Staining with the BD® Single-Cell Multiplexing Kit (SMK)

BD OMICS Guard™ CRYO Preservation Buffer is compatible with sample multiplexing after sample preservation. If labeling cells with BD® Sample Tags without BD® AbSeq Antibody-Oligos staining or sequential staining, follow the steps below and refer to the BD Rhapsody™ System Single-Cell Labeling with BD® Single-Cell Multiplexing Kits Protocol (Doc ID: 23-21340(02)). If co-labeling with BD® Sample Tags and BD® AbSeq Antibody-Oligos, see below.

Sample Tag labeling without BD® AbSeq Antibody-Oligos staining or for sequential Sample Tag

staining.

1. The sample should be thawed and prepared as described in the appropriate section above and resuspended in Sample Buffer from the BD Rhapsody™ Cartridge Reagent Kit or PBS + 2% FBS.
2. Centrifuge the sample at 800 x *g* for 5 min and remove the supernatant without disturbing the pellet.
3. Resuspend the cells in 180 to 200 µL BD Pharmingen™ Stain Buffer (FBS) (Cat. No. 554656). Briefly centrifuge Sample Tag tubes to collect the contents at the bottom and, for each sample, transfer 180-µL cell suspension to a Sample Tag tube. Pipet-mix.
4. Incubate at room temperature for 20 min and transfer each labeled cell suspension to a 5-mL polystyrene Falcon tube. Add 2 mL BD Pharmingen™ Stain Buffer to labeled cells and pipet-mix.
5. Centrifuge each tube at 800 × *g* for 5 min and wash for a total of 2 or 3 washes using 2 mL BD Pharmingen™ Stain Buffer (FBS), centrifuging cells in between wash steps.
6. Proceed with BD Fc Block™ staining if appropriate (see below).

Staining with BD® AbSeq Antibody Oligos/ BD OMICS One™ Protein Panels with optimal co-labeling of Sample Tags

BD OMICS-Guard™ CRYO Preservation Buffer is compatible with antibody staining after sample preservation.

For CITE-seq workflows using BD® AbSeq Antibody-Oligos and/or BD OMICS-One™ Protein Panels, use of the BD® AbSeq Enhancer Kit (Cat. No. 570750) must be included to optimize performance. AbSeq Enhancers may be added at the BD Fc Block™ step or as a separate incubation prior to antibody-oligo staining.

Staining using the BD® OMICS-One Comprehensive Immuno-Oncology Protein Panel:

Prepare the BD Fc Block™ Reagent / BD® AbSeq Enhancer master mix as follows:

Component	Volume/sample (µL)
BD Pharmingen™ Stain Buffer (FBS)	12.5
BD Pharmingen™ Human BD Fc Block™	5
BD® AbSeq Enhancer Kit	7.5 (2.5 µL each AbSeq Enhancer 1 to 3)
Total	25

1. The sample should be thawed and prepared as described above and resuspended in Sample Buffer from the BD Rhapsody™ Cartridge Reagent Kit or PBS + 2% FBS.
2. Centrifuge the sample at 800 x *g* for 5 min and remove the supernatant without disturbing the pellet.
3. Resuspend the pellet in 25 µL of the final BD Fc Block™ Reagent/ BD® AbSeq Enhancer master mix, prepared earlier, referenced in the above table.
4. Incubate the cells at room temperature for 10 min.
5. Remove the BD OMICS-One™ Protein Panel from foil bags and bring up to room temperature for 5 min.
6. Make sure all pellets are located at the bottom of the tubes. If not, briefly centrifuge to collect the contents at the tube bottom.
7. For each tube, add 35 µL of nuclease-free water to the bottom of the tube and allow antibodies to reconstitute for 5 min at room temperature.
8. Place the reconstituted antibodies on ice until the cells are ready for staining. Note: Reconstitute antibody immediately before cell staining. Prolonged incubation of reconstituted antibodies may increase the non-specific background.
9. Combine the BD Fc Block™ Reagent/ BD® AbSeq Enhancer master mix with cells to the BD OMICS-One™ Protein Panels and incubate 30–60 min on ice.
10. After incubation, add 3–4 mL BD Pharmingen™ Stain Buffer (FBS) to labeled cells and pipet-mix.
11. Centrifuge at 800 × *g* for 5 min.
12. Uncap the tube and invert to decant supernatant into biohazardous waste. Keep the tube inverted and gently blot on a lint-free wiper to remove residual supernatant from tube rim.
13. Repeat steps 10–12 twice more for a total of 3 washes.
14. Resuspend the final washed cell pellet in 620 µL cold Sample Buffer from the BD Rhapsody™ Enhanced Cartridge Reagent V3 (Cat. No. 667052) and proceed to single-cell capture with on-cartridge washing described below. Refer to the BD Rhapsody™ HT Single-Cell Analysis System Single-Cell Capture and cDNA Synthesis Protocol (Doc ID 23-24252) or BD Rhapsody™ HT Xpress System Single-Cell Capture and cDNA Synthesis

Protocol (Doc ID 23-24253) for additional details.

Note: if co-labeling with Sample Tags, 20 µL Sample Tag should be incorporated into the antibody-oligo cocktail prior to staining the cells. For more information on how to stain with the BD® Single-Cell Multiplexing Kit and/or with the BD OMICS-One™ Comprehensive Immuno-Oncology Protein Panel, please refer to the technical data sheet for the BD OMICS-One™ Comprehensive Immuno-Oncology Protein Panel and follow the instructions within.

Staining using up to three (3) BD OMICS-One™ Protein Panels (<90-plex):

Prepare the BD Fc Block™ Reagent and BD® AbSeq Enhancer Kit mixture as follows:

Component	Volume/sample (µL)
BD Pharmingen™ Stain Buffer (FBS)	6
BD Pharmingen™ Human BD Fc Block™	5
BD® AbSeq Enhancer Kit	30 (10 µL each AbSeq Enhancer 1 to 3)
Total	100

1. The sample should be thawed and prepared as described above and resuspended in Sample Buffer or PBS + 2% FBS.
2. Centrifuge the sample at 800 x *g* for 5 min and remove the supernatant without disturbing the pellet.
3. Resuspend the pellet in 100 µL of the final BD Fc Block™ Reagent/ BD® AbSeq Enhancer master mix , prepared earlier, referenced in the above table.
4. Incubate the cells at room temperature for 10 min.
5. Remove the BD OMICS-One™ Protein Panel from foil bags and bring up to room temperature for 5 min.
6. Make sure all pellets are located at the bottom of the tubes. If not, briefly centrifuge to collect the contents at the tube bottom.
7. For each tube, add 35 µL of nuclease-free water to the bottom of the tube and allow antibodies to reconstitute for 5 min at room temperature.
8. When using the BD OMICS-One™ Protein Panel (30-plex) staining Protocols for up to three (3) panels, the final AbSeq cocktail volume should be 105 µL. For three panels, the combined volume is 105 µL (35 µL per panel) and no additional BD Pharmingen™ Stain Buffer (FBS) is required. For one or two panels, adjust the final volume to 105 µL by adding the appropriate amount of BD Pharmingen™ Stain Buffer (FBS).
   Note: This differs from the volume specified in the BD OMICS-One™ Protein Panel Staining Protocols, which call for a final volume of 175 µL for the BD OMICS-One™ Protein Panel cocktail and 25 µL for the BD Fc Block™ Reagent master mix.
9. Place the reconstituted antibodies on ice until the cells are ready for staining. Note: Reconstitute antibody immediately before cell staining. Prolonged incubation of reconstituted antibodies may increase the non-specific background.
10. Combine the BD Fc Block™ Reagent/ BD® AbSeq Enhancer master mix with cells to the BD OMICS-One™ Protein Panels and incubate 30–60 minutes on ice (up to 105 µL).
11. After incubation, add 3–4 mL BD Pharmingen™ Stain Buffer (FBS) to labeled cells and pipet-mix.
12. Centrifuge at 800 × *g* for 5 min.
13. Uncap the tube and invert to decant supernatant into biohazardous waste. Keep the tube inverted and gently blot on a lint-free wiper to remove residual supernatant from tube rim.
14. Repeat steps 11–13 twice more for a total of 3 washes.
15. Resuspend the final washed cell pellet in 620 µL cold Sample Buffer from the BD Rhapsody™ Enhanced Cartridge Reagent V3 (Cat. No. 667052) and proceed to single cell capture with on-cartridge washing described below. Refer to the BD Rhapsody™ HT Single-Cell Analysis System Single-Cell Capture and cDNA Synthesis Protocol (Doc ID 23-24252) or BD Rhapsody™ HT Xpress System Single-Cell Capture and cDNA Synthesis Protocol (Doc ID 23-24253) for additional details.

Note for co-labeling with Sample Tag:

- If co-labeling cells with BD® Single-Cell Multiplexing Kit and 1 or 2 panels, use the above steps and add 20 µL of Sample Tag to the reconstituted panels and bring volume up to of 105 µL.
- If co-labeling cells with BD® Single-Cell Multiplexing Kit and 3 panels, use the above steps and add 20 µL of Sample Tag to the reconstituting panels and keep at a final volume of 125 uL.

- Sequential staining with Sample Tags and details on staining procedures can be found in the BD Rhapsody™ System Single-Cell Labeling with BD® Single-Cell Multiplexing Kits Protocol (Doc ID 23-21340(02).

BD Rhapsody™ Cartridge workflow modifications

When using WTA Next chemistry, follow the sample lysis time specified in the applicable protocol. When using earlier WTA chemistries with samples preserved in BD OMICS-Guard™ CRYO Preservation Buffer, extend the sample lysis time to 10 min.

Cartridge loading and washing

Resuspend the final washed cell pellet in 620 µL cold Sample Buffer from the BD Rhapsody™ Enhanced Cartridge Reagent V3 (Cat. No. 667052). Proceed to single-cell capture using the BD Rhapsody™ HT Xpress System.

For full procedural details, refer to:

- BD Rhapsody™ HT Xpress System Extended-Lysis Single-Cell Capture and cDNA Synthesis (Doc ID 23-24983)
- BD Rhapsody™ HT Single-Cell Analysis System Extended-Lysis Single-Cell Capture and cDNA Synthesis (Doc ID 23-24984)
- Single-Cell ATAC-Seq and BD OMICS-One™ WTA Next Library Preparation Protocol (Doc ID 23-25006(01))
- Single-Cell ATAC-Seq BD OMICS-One™ WTA Next and Sample Tag Library Preparation Protocol (Doc ID 23-25007(01))

On-cartridge wash procedure

Perform the following steps after cell settling (8-min incubation at room temperature).

1. After loading the cells into the BD Rhapsody™ 8-Lane Cartridge, incubate the cartridge at room temperature for 8 min to allow cell settling.
2. Place the cartridge on the BD Rhapsody™ HT Xpress instrument and perform the wash steps as follows:

Material To Load	Volume (µL) per Lane	Pipette Mode
Air	380	Prime/Wash
Cold sample buffer	380	Prime/Wash
Air	380	Prime/Wash
Cold sample buffer	380	Prime/Wash

Ordering information

Cat. No.	Name	Size	Clone
574172	BD OMICS-Guard™ CRYO Preservation Buffer Kit	12 each	(none)
574173	BD OMICS-Guard™ CRYO Preservation Buffer	50 mL	(none)
Suggested companion products			
666625	BD Rhapsody™ HT Xpress Package	–	(none)
633701	BD Rhapsody™ Scanner	–	(none)
570911	BD OMICS Guard™ Sample Preservation Buffer	50 mL	(none)
666262	BD Rhapsody™ 8 Lane Cartridge	1 each	(none)
667052	BD Rhapsody™ Enhanced Cartridge Reagent Kit V3	1 each	(none)
633773	BD Rhapsody™ cDNA Kit	1 each	(none)
572620	BD OMICS-One™ WTA Next Amplification Kit	8 tests	(none)
571361	BD Rhapsody™ Multiomic ATAC Seq Amplification Kit	1 each	(none)
667058	BD Rhapsody™ TCR/BCR Next Amplification Kit	1 each	(none)
572316	BD OMICS-One™ Immuno-Oncology Protein Panel	2 tests	(none)
572612	BD OMICS-One™ Innate Protein Panel	2 tests	(none)
572618	BD OMICS-One™ Comprehensive Immuno-Oncology Protein Panel	2 tests	(none)
570751	BD® RNase Inhibitor	1 each	(none)
570750	BD® AbSeq Enhancer Kit	1 each	(none)
633781	BD® Hu Single Cell Sample Multiplexing Kit	1 each	(none)

554656	BD Pharmingen™ Stain Buffer (FBS)	500 mL	(none)
564220	BD Pharmingen™ Human BD Fc Block™	0.25 mg	Fc1
633774	BD Rhapsody™ Targeted mRNA and AbSeq Amplification Kit	1 each	(none)

Product notices

1. Refer to **bdbiosciences.com/us/s/resources** for technical protocols.
2. Refer to **regdocs.bd.com** to access safety data sheets (SDS).
3. For U.S. patents that may apply, see **bd.com/patents**.
4. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
5. Source of all serum proteins is from USDA-inspected abattoirs located in the United States.

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