

BD[®] OMICS-Guard Sample Preservation Buffer

Protect your samples, guard your science



The BD[®] OMICS-Guard Sample Preservation Buffer offers a simple solution for biological sample preservation to provide flexibility when samples cannot be processed at the same time or need to be transported between study sites. With this one-step buffer, you can trust that your samples will remain intact for up to 72 hours, with the integrity of both RNA and protein information preserved—no more sample degradation worries that affect your research.

Key features



Stress-free, one-step preservation protocol with minimum hands-on time



Optimised to preserve cells for a variety of downstream transcriptomic, proteomic and multiomic applications including RNA-seq, CITE-seq, flow cytometry and qPCR



Protects cell viability and preserves different cell populations in your samples for up to 72 hours at 4 °C

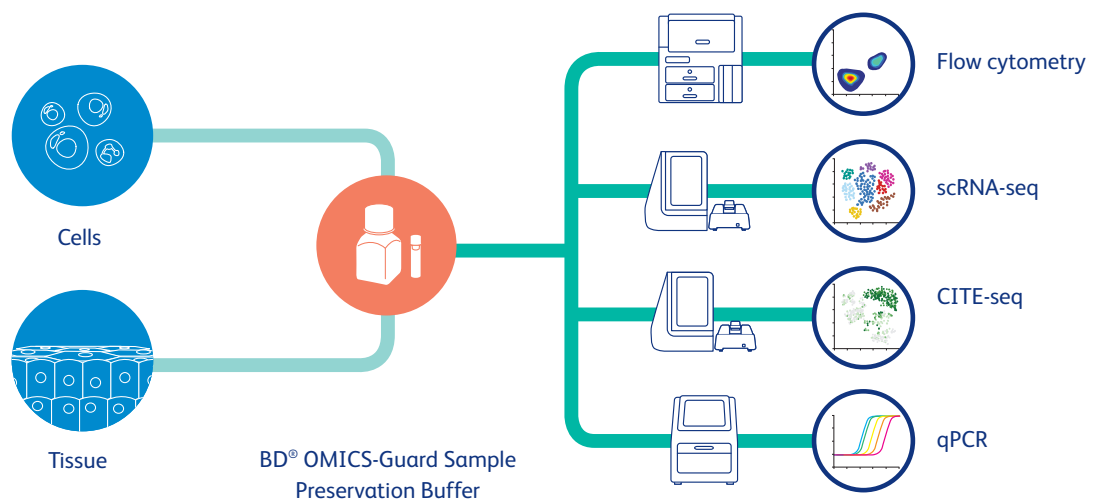


Developed and tested across multiple sample types: PBMCs and tissue samples



Available in two, easy-to-use formats: 50 mL bottle or 12 x 1 mL vials

Versatile applications of the BD[®] OMICS-Guard Sample Preservation Buffer



Product usage instructions

	Single-cell suspension	Tissue
Recommended usage	1 to 10 million cells/1 mL BD® OMICS-Guard Buffer	30 to 50 mg of tissue/20 mL BD® OMICS-Guard Buffer
Storage temperature	4 °C	4 °C
Storage duration	Up to 72 hours	Up to 72 hours
Sample preservation protocol	<ol style="list-style-type: none">1 Collect single cells/dissociated single cells in suspension and spin at 400 x g for 5 minutes.2 Discard supernatant and resuspend the cells in the BD® OMICS-Guard Buffer as recommended above. Note: Handle the buffer-containing tubes/ bottle under aseptic conditions. Cells can be stored in Eppendorf tubes or equivalent.3 Place cells at 4 °C for up to 72 hours.4 After storage, spin cells at 800 x g for 5 minutes and discard the supernatant to remove the BD® OMICS-Guard Buffer. No further washing is required.5 Resuspend the cells in desired buffer for downstream applications.	<ol style="list-style-type: none">1 Section tissues into pieces and immediately place them into the BD® OMICS-Guard Buffer. Note: Handle the buffer-containing tubes/ bottle under aseptic conditions.2 Place the preserved tissue at 4 °C for up to 72 hours.3 After storage, dissociate the tissue by the desired method for single-cell application, spin the cells at 800 x g for 5 minutes and discard supernatant to remove the BD® OMICS-Guard Buffer. No further washing is required.4 Resuspend the cells in desired buffer for downstream applications.

*The BD® OMICS-Guard Sample Preservation Buffer is a PFA-free reagent.

Protocol for CITE-seq applications

BD® OMICS-Guard Buffer allows antibody staining before or after sample preservation. For CITE-seq applications using BD® AbSeq Antibody-Oligos **AFTER** sample preservation, use of the BD® AbSeq Enhancer Kit (Cat. no. 570750) is highly recommended. BD® AbSeq Enhancers can be added to the BD Fc Block™ Reagent step or used separately prior to single-cell staining with BD® AbSeq Antibody-Oligos.

Note: Staining with BD® AbSeq Antibody-Oligos **BEFORE** sample preservation or staining with the BD® Single-Cell Multiplexing Kit **ONLY** after sample preservation does not require the use of the BD® AbSeq Enhancer Kit.

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Staining protocol using human PBMC

1 Prepare the Human BD Fc Block™ Reagent as follows:

Component	Volume/sample (µL)	Volume/sample with overage (µL)
Stain buffer	65	78
Human BD Fc Block™ Reagent	5	6
Total	70	84

- 2 To the 70 µL Human BD Fc Block™ Reagent mixture, add 10 µL of each of the three BD® AbSeq Enhancers for a total of 30 µL.
Note: The Human BD Fc Block™ Reagent and BD® AbSeq Enhancers mixture should have a final volume of 100 µL.
- 3 Spin the cell suspension from the preserved sample at 800 x g and remove the supernatant without disturbing the pellet.
- 4 Add the 100 µL final mix and resuspend the cell pellet.
- 5 Incubate the cells at room temperature for 10 minutes.
- 6 Add BD® AbSeq Antibody-Oligo cocktails per the standard AbSeq staining protocols (100 µL 2X BD® AbSeq Antibody-Oligo labeling MasterMix, incubate 30–60 minutes on ice). See *BD Rhapsody™ System Single-Cell Labeling with BD® AbSeq Ab-Oligos (1 plex to 40 plex) Protocol* (Doc ID: 23-24262).

For BD Rhapsody™ Single-Cell Analysis System users

For cells/tissues preserved in BD® OMICS-Guard Buffer, extend the lysis time in the single-cell capture workflow from 2 minutes to 5 minutes for optimal results.



See how the BD® OMICS-Guard Buffer was used in the Intracellular CITE-seq Assay using BD® AbSeq Antibody-Oligos.



Learn more about the versatile applications of the BD® OMICS-Guard Sample Preservation Buffer.

Ordering information

Description	Size	Cat. No.
BD® OMICS-Guard Sample Preservation Buffer Kit	12 vials/kit, 1 mL/vial	570908
BD® OMICS-Guard Sample Preservation Buffer	50 mL	570911
BD® AbSeq Enhancer Kit	Kit	570750
Suggested companion products		
BD Rhapsody™ HT Xpress System Package		666625
BD Rhapsody™ Scanner		633701
BD Rhapsody™ Whole Transcriptome Analysis (WTA) Amplification Kit		633801
BD Rhapsody™ Targeted mRNA and AbSeq Amplification Kit		633774
BD Rhapsody™ cDNA Kit		633773
BD Rhapsody™ Enhanced Cartridge Reagent Kit		664887
BD Rhapsody™ Cartridge Kit		633733
BD Rhapsody™ 8-Lane Cartridge		666262
BD Horizon™ Dri Tumor & Tissue Dissociation Reagent (TTDR)		661563
BD® AbSeq Immune Discovery Panel		625970
BD® Human Single-Cell Multiplexing Kit		633781
BD® Single-Cell Multiplexing Set Rat Anti-Mouse MHC-H2 Class I (M1/42)		626545
BD® Mouse Single-Cell Multiplexing Kit		633793
Custom BD® AbSeq Antibodies		Contact for more info*
BD® AbSeq Single-Vial Reagents		Contact for more info*
BD Pharmingen™ Human BD Fc Block™ Reagent		564219
BD Pharmingen™ Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™ Reagent)		553141
BD Pharm Lyse™ Lysing Buffer		555899
BD Pharmingen™ Stain Buffer (FBS)		554656

To request a quote or place an order, email bdb_anz@bd.com or contact your local BD sales representative.

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