

## **Instructions for use**

**AltoStar<sup>®</sup>**

**Respiratory Sample  
Pretreatment Buffer 1.5**

04/2022 EN



# AltoStar<sup>®</sup>

## Respiratory Sample Pretreatment Buffer 1.5

For research use only!

(RUO)



RSPB15-04



192



04 2022



altona Diagnostics GmbH • Mörkenstr. 12 • D-22767 Hamburg

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## 1. Application

The AltoStar® Respiratory Sample Pretreatment Buffer 1.5 is a reagent suitable for the stabilization and liquefaction of bronchoalveolar lavage (BAL) samples for the subsequent isolation and purification of nucleic acids.

**For research use only (RUO)! Not for use in diagnostic procedures.**

## 2. Kit content

The AltoStar® Respiratory Sample Pretreatment Buffer 1.5 contains the following components:

**Table 1:** Kit components

Component	Number of bottles	Volume per bottle [ml]
RSPB*	2	58

\* Respiratory Sample Pretreatment Buffer

The AltoStar® Respiratory Sample Pretreatment Buffer 1.5 contains enough reagents for the pretreatment of 192 respiratory samples.

Upon receipt and before first use, check the product and its components for:

- Integrity
- Completeness with respect to number, type and filling
- Correct labeling
- Expiration date
- Clarity and absence of particles

If one or more tubes have been compromised during shipment or are missing, contact altona Diagnostics technical support for assistance (see chapter 8. Technical support).

### 3. Storage and handling

The RSPB (Respiratory Sample Pretreatment Buffer) is a ready-to-use solution.

#### 3.1 Storage

The RSPB is shipped at room temperature and should be stored at +2 °C to +8 °C upon receipt.

#### 3.2 Handling

The RSPB is stable after initial opening for 14 days, when closed after each use and stored as follows: bottles should be closed with the original cap after use and stored at +2 °C to +8 °C.

#### NOTE



Reagents should be always closed after use.

### 4. Product description

**Table 2:** Kit component description

Kit component	Description
RSPB*	The RSPB contains different salts to liquify mucin rich samples and stabilizes and protects nucleic acids against nucleases in solution.

\* Respiratory Sample Pretreatment Buffer


## 4.1 Samples

### 4.1.1 Sample types

The following sample types can be used with the AltoStar® Respiratory Sample Pretreatment Buffer 1.5:

- Bronchoalveolar lavage (BAL)

## 5. Safety information

Respiratory Sample Pretreatment Buffer 1.5		
 GHS07  Danger!	H302	Harmful if swallowed.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	P264	Wash hands, forearms and face thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P280	Wear protective gloves, protective clothing, eye protection.
	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337+P313	If eye irritation persists: Get medical advice/attention.
	<b>Contains:</b>	Guanidinium chloride (CAS 50-01-1) 25–50 %. Disodium edetic acid (EDTA), dihydrate (CAS 6381-92-6) 1–2.5 %.

### NOTE



For more information, consult the safety data sheet (SDS).

## 6. Using the AltoStar® Respiratory Sample Pretreatment Buffer 1.5

The following chapters describe the use of the AltoStar® Respiratory Sample Pretreatment Buffer 1.5 with the AltoStar® Automation System AM16 (Hamilton; in the following summarized as AltoStar® AM16, Order No. AM16).

## 6.1 Sample volume

The AltoStar® AM16 allows purification of 500 µl of pretreated sample. Additional pretreated sample volume has to be provided to account for the dead volume of the sample tube used. When using the sample tubes purchased from Altona Diagnostics (see table 4), provide at least 700 µl pretreated sample volume in total.

### NOTE



The sample volume is not checked by the system prior to processing. Samples with insufficient volume will not be processed and error flagged during the sample transfer step.

## 6.2 Sample tubes

Sample tubes suitable for use on the AltoStar® AM16 can be purchased from Altona Diagnostics (see table 4). Other sample tubes can be tested for applicability by the user. For details, refer to the instructions for use of the AltoStar® Purification Kit 1.5 (Order No. PK15-06).

## 6.3 Sample barcodes

For automated sample identification by the AltoStar® AM16 all sample tubes must be labeled with a suitable barcode. For details, refer to the instructions for use of the AltoStar® Purification Kit 1.5.



## 6.4 Equipment and reagents to be supplied by the user

**Table 3:** Equipment and reagents

Material	Description	Order No.
AltoStar® AM16 Workflow	Product bundle containing the AltoStar® Automation System AM16, the AltoStar® Connect software and IT hardware	AM16
AltoStar® Purification Kit 1.5	Nucleic acid isolation and purification chemistry for use with the AltoStar® Automation System AM16	PK15-06

**Table 4:** Additional laboratory material

Material	Description	Order No.
Sample tubes	e.g. 7 ml tube with cap, 82 x 13mm	VK000010
Sample tube caps	e.g. ribbed plug for sample tubes	VK000011

## 6.5 General material and devices

- Vortex mixer
- Heater (e.g. water bath or block heater)
- Powder-free gloves (disposable)
- Pipettes (adjustable, for sample preparation)
- Pipette tips with filters (disposable, for sample preparation)

## 6.6 Procedure

### 6.6.1 BAL sample pretreatment procedure

1. Transfer the required volume of BAL sample from the primary tube to a suitable barcode-labeled sample tube and add the same volume of RSPB to the sample to achieve a volumetric ratio of 1:1 (e.g. 400 µl of BAL sample and 400 µl of RSPB).
2. Immediately and thoroughly mix by vortexing for 10 seconds.
3. Incubate the sample/RSPB mixture at +60 °C for 15 min (e.g. with a block heater or water bath).
4. After incubation, mix again thoroughly (e.g. by vortexing) for 10 seconds.
5. The BAL sample/RSPB mixture shall be free of solids and high viscosity constituents. If this is not the case, transfer only the liquid fraction of the mixture and discard the solid fraction. If the liquid fraction is not enough for the purification process, repeat the pretreatment procedure with the sample material and combine the liquid fractions until enough liquid is reached.
6. Start the purification run on the AltoStar® AM16 for the pretreated BAL samples.

#### NOTE



The sample volume is not checked by the system prior to processing. Samples with insufficient volume will not be processed and error flagged during the sample transfer step.

## 7. Disposal

Dispose of hazardous and biological waste in compliance with local and national regulations. Leftover product components and waste should not be allowed to enter sewage, water courses or the soil.

## 8. Technical support

For customer support, contact altona Diagnostics technical support:

**e-mail:**                **support@altona-diagnostics.com**

**phone:**                **+49-(0)40-5480676-0**

## 9. Trademarks and disclaimers













AltoStar® (altona Diagnostics).

Registered names, trademarks, etc. used in this document, even if not specifically marked as such, are not to be considered unprotected by law.

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## 10. Symbols

Symbol	Explanation
	Research use only
	Batch code
	Content
	Catalogue number
	Consult instructions for use
	Contains sufficient for "n" tests/reactions (rxns)
	Temperature limit
	Use-by date
	Manufacturer
	Version
	Note
	Unique formula identifier

## 11. Revision history

**Table 5:** Revision history

Identifier	Date of issue [month/year]	Modifications
INS-RSPB1500- EN-S01	04/2022	Initial release

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**always a drop ahead.**

altona Diagnostics GmbH  
Mörkenstr. 12  
22767 Hamburg, Germany

phone +49 40 548 0676 0  
fax +49 40 548 0676 10  
e-mail [info@altona-diagnostics.com](mailto:info@altona-diagnostics.com)

**[www.altona-diagnostics.com](http://www.altona-diagnostics.com)**

