

Instructions for use

AltoStar[®]

Whole Blood

Pretreatment Buffer 1.5

01/2024 EN

AltoStar[®]

Whole Blood Pretreatment Buffer 1.5

For research use only!

(RUO)

REF

WBPB15-06

CONT

48 x 4.9 ml



01 2024



altona Diagnostics GmbH • Mörkenstr. 12
22767 Hamburg • Germany

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1. Application

The AltoStar® Whole Blood Pretreatment Buffer 1.5 is a reagent suitable for the stabilization and liquefaction of whole blood 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® Whole Blood Pretreatment Buffer 1.5 contains the following components:

Table 1: Kit components

Component	Number of tubes	Volume per tube [ml]
WBPB*	48	4.9

* Whole Blood Pretreatment Buffer

The AltoStar® Whole Blood Pretreatment Buffer 1.5 contains enough reagents for the pretreatment of 576 whole blood samples using 350 µl sample volume (see chapter 6.6 Procedure).

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 WBPB (Whole Blood Pretreatment Buffer) is a ready-to-use solution.

3.1 Storage

The WBPB is shipped at room temperature and should be stored at +15 °C to +30 °C upon receipt.

3.2 Handling

The WBPB is stable after initial opening for 28 days, when closed after each use and stored as follows: tubes should be closed with the original cap after use and stored at +15 °C to +30 °C.

NOTE



Reagents should be always closed after use.

4. Product description

Table 2: Kit component description

Kit component	Description
WBPB*	Contains surfactants and salts to stabilize and liquefy whole blood samples for the subsequent isolation and purification of nucleic acids.

* Whole Blood Pretreatment Buffer


4.1 Samples

4.1.1 Sample types

The following sample types can be used with the AltoStar® Whole Blood Pretreatment Buffer 1.5:

- EDTA whole blood
- Citrate whole blood

5. Safety information

Whole Blood Pretreatment Buffer		
 GHS05	H314	Causes severe skin burns and eye damage.
	H318	Causes serious eye damage.
	H412	Harmful to aquatic life with long lasting effects.
	P260	Do not breathe mist, vapours, spray.
	P264	Wash hands thoroughly after handling.
	P273	Avoid release to the environment.
	P280	Wear protective gloves, eye protection, face protection.
Danger!	P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER, a doctor.
Contains:		Sodium hydroxide (CAS 50-01-1) 1–2.5 %

NOTE



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

6. Using the AltoStar® Whole Blood Pretreatment Buffer 1.5

The following chapters describe the use of the AltoStar® Whole Blood 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.

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 (Version 1.7.4 or higher) 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 13 mm	VK000010
Sample tube caps	e.g., ribbed plug for sample tubes	VK000011

6.5 General material and devices

- Vortex mixer
- Powder-free gloves (disposable)
- Pipettes (adjustable, for sample preparation)
- Pipette tips with filters (disposable, for sample preparation)

6.6 Procedure

6.6.1 Whole blood pretreatment procedure

1. Transfer the required volume of whole blood free of solids and high-viscosity constituents from the primary tube to a suitable barcode-labeled sample tube and add the same volume of WBPB to the sample to achieve a volumetric ratio of 1:1 (e.g., 350 µl of whole blood and 350 µl of WBPB).
2. Immediately and thoroughly mix by vortexing for 10 seconds. Insufficient mixing may render the sample unsuitable for processing due to increased viscosity or clotting.
3. Avoid formation of bubbles. If bubbles have formed during mixing they can be removed after 2–3 minutes by carefully tapping the sample tube. Do not centrifuge the sample.
4. Start the purification run on the AltoStar® AM16 for the pretreated whole blood samples within 60 minutes from the beginning of the pretreatment.

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
	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-WBPB1500-EN-S02	01/2024	<ul style="list-style-type: none">• Change of the number of reactions to volume• Chapter 2: addition of sample volume• Chapter 3.2: stability of the WBPB after initial opening increased from 14 days to 28 days• Editorial changes

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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

www.altona-diagnostics.com