WHO Prequalification of Diagnostics Programme
PUBLIC REPORT

Product: Alere Determine™ HIV-1/2
Number: PQDx 0033-013-00

Abstract

Alere Determine™ HIV-1/2 with product codes 7D2342, 7D2343 and 7D2343SET manufactured by **Alere Medical Co. Ltd.**, 357 Matsuhidai Matsudo-shi, Chiba-ken 270-2214, Japan, **rest of the world regulatory version** (non CE-marked regulatory version) was accepted for the WHO list of prequalified diagnostics and was listed on 25 November 2011. This public report was amended on 16 June 2016, and then on 12 July 2016.

Intended use:
Alere Determine® HIV-1/2 is an in vitro, visually read, qualitative immunoassay for the detection of antibodies to HIV-1 and HIV-2 in human serum, plasma or whole blood. The test is intended as an aid to detect antibodies to HIV-1/HIV-2 from infected individuals.

Assay principle:
Alere Determine HIV-1/2 is an immunochromatographic test for the qualitative detection of antibodies to HIV-1 and HIV-2. Sample is added to the sample pad. As the sample migrates through the conjugate pad, it reconstitutes and mixes with the selenium colloid-antigen conjugate. This mixture continues to migrate through the solid phase to the immobilized recombinant antigens and synthetic peptides at the patient window site.

If antibodies to HIV-1 and/or HIV-2 are present in the sample, the antibodies bind to the antigen-selenium colloid and to the antigen at the patient window, forming a red line at the patient window site. If antibodies to HIV-1 and/or HIV-2 are absent, the antigen-selenium colloid flows past the patient window, and no red line is formed at the patient window site. To ensure assay validity, a procedural control bar is incorporated in the assay device.

A negative result with Determine HIV-1/2 does not exclude the possibility of infection with HIV. A false negative result can occur in the following circumstances:
- low levels of antibody (e.g., early seroconversion specimens) are below the detection limit of the test
- infection with a variant of the virus that is less detectable by the Determine HIV-1/2 assay configuration
- HIV antibodies in the patient that do not react with specific antigens utilized in the assay configuration
- specimen handling conditions which result in loss of HIV antibody multivalency

- For these reasons care should be taken in interpreting negative results. Other clinical data (e.g., symptoms or risk factors) should be used in conjunction with the test results.

Positive specimens should be retested using another method and the results should be evaluated in light of the overall clinical evaluation before a diagnosis is made.

Test kit contents:

Component	20 tests (7D2342)	100 tests (7D2343)	100 tests (7D2343SET)
Test cards	2 10-test cards	10 10-test cards	10 10-test cards
Chase buffer	N/A	N/A	1 bottle/2.5ml
EDTA capillary tubes	N/A	N/A	100
Blood lancets	N/A	N/A	100

Items required but not provided within test kit:

Consumables	Product codes
Chase buffer (1 bottle/2.5ml)	7D2243
EDTA capillary tubes (100 units)	7D2222
Blood lancets (100 units)	7D2233

Storage:
The test kit should be stored at 2-30 °C.

Shelf-life upon manufacture:
18 months.

Summary of prequalification status for Alere Determine™ HIV-1/2

	Initial acceptance	
	Date	**Outcome**
PQ amended	16 June 2016, 12 July 2016	listed
Status on PQ list	25 November 2011	listed
Dossier assessment	22 November 2011	MR
Inspection status	24 October 2011	MR
Laboratory evaluation	11 November 2011	MR

MR: Meets Requirements
NA: Not Applicable

Prioritization for prequalification
Based on the established criteria, Alere Determine™ HIV-1/2 was given priority for WHO prequalification.

Product dossier assessment
Alere Medical Co. Ltd. submitted a product dossier for Alere Determine™ HIV-1/2 as per the "Instructions for compilation of a product dossier" (PQDx_018 v1). The information submitted in the product dossier was reviewed by WHO staff and external experts (assessors) appointed by WHO.

Commitments for prequalification:
1. analytical performance studies
2. clinical performance studies
3. stability studies
4. a new version of the instructions for use.

WHO will to follow-up on implementation of these commitments at the next re-inspection.

Based on the product dossier screening and assessment findings, the product dossier for Alere Determine™ HIV-1/2 meets WHO prequalification requirements.

Manufacturing site inspection

A comprehensive inspection was performed at the site of manufacture of Alere Determine™ HIV-1/2 manufactured by Alere Medical Co. Ltd., at 357 Matsuhidai Matsudo-shi, Chiba-ken 270-2214, Japan on 11 to 15 May 2015[1]. The inspection procedure is described in "Information for manufacturers on WHO prequalification inspection procedures for the sites of manufacture of diagnostics" (PQDx_014 v1).

The inspection found that Alere Medical Co. Ltd. had an established quality management system and manufacturing practices in place that should ensure the manufacture of a product of consistent quality. The manufacturer's responses to the nonconformities found at the time of the inspection were accepted on 13 April 2016.

Commitments for prequalification:
1. Alere Medical Co. Ltd. will continue to review Risk Analysis and Risk Management for accuracy of assessment of risk, attributed to specific components of the product, and the mitigation of such risk, and to ensure ongoing due consideration of end users in resource limited and environmentally challenging regions to which the product is distributed.
2. Alere Medical Co. Ltd. will inform the WHO of changes made subsequent to the site inspection, such as change in location of site of manufacture of major components

[1] Previous inspection took place on 28 September to 1 October 2010

of the test, or other changes to the manufacturing process that may affect the quality of the product.

Based on the site inspection and corrective action plan review, the quality management system for Alere Determine™ HIV-1/2 meets WHO prequalification requirements.

Laboratory evaluation

Alere Determine™ HIV-1/2 was evaluated by WHO in the third quarter of 2011 at the Institute of Tropical Medicine, Belgium – a WHO Collaborating Centre for HIV/AIDS Diagnostics and Laboratory Support. The laboratory evaluation was conducted according to the "WHO Protocol for the laboratory evaluation of HIV serology assays" (PQDx_030 V1.0), and drew the following conclusions:

Alere Determine™ HIV-1/2 is an immunochromatographic rapid diagnostic test for the detection of antibodies to HIV-1/2 in human serum, plasma, and whole blood. A volume of 50µl of serum, plasma or venous/capillary whole blood is required to perform the test procedure. This type of assay requires no sophisticated equipment and can therefore be performed in laboratories with limited facilities. Reading of the results are performed visually i.e. subjective reading.

In this limited performance evaluation using a panel of 1079 biological specimens, we observed an initial (sensitivity (95% CI) of 100% (99.1% - 100%) and an initial specificity (95% CI) of 97.87% (96.4% - 98.8%) compared to the reference assays. The final sensitivity (95% CI) was 100% (99.1% - 100%) and the final specificity (95% CI) was 98.93% (97.8% - 99.6%) compared to the reference assays. In this study, 0.3% of the overall results were recorded as indeterminate. Results were interpreted independently by three technicians; the inter-reader variability was 1.4%. The invalid rate was 0.3% for initial testing and 0.1% for repeat testing.

Change notification

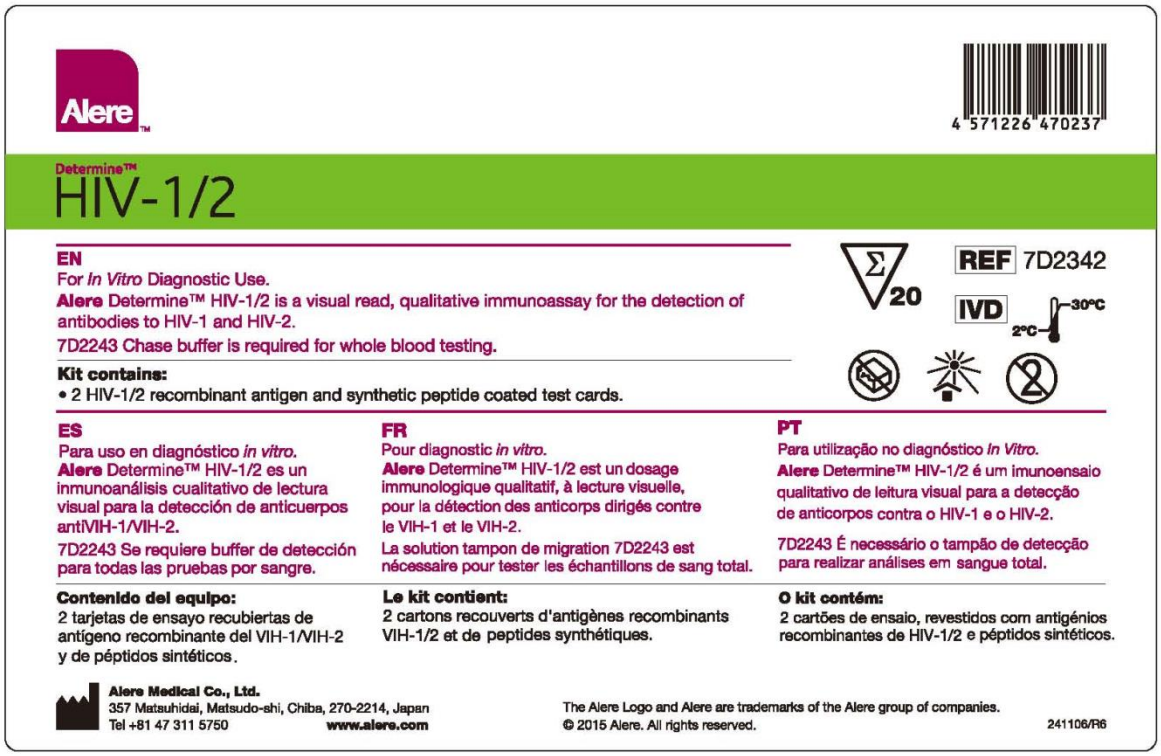
In 2015, Alere Medical Co. Ltd., notified WHO of a change related to addition of a product code for a configuration that included all accessories and reagents required to conduct the test procedure. This notification of change was assessed and product was found to meet WHO prequalification requirements.

In 2016, Alere Medical Co. Ltd., notified WHO of a change related to shelf life. This notification of change was assessed and product was found to meet WHO prequalification requirements.

Labelling

1. **Labels**
2. **Instructions for use**

1. Labels



Alere

4 571226 470237

Determine™
HIV-1/2

EN
For *In Vitro* Diagnostic Use.
Alere Determine™ HIV-1/2 is a visual read, qualitative immunoassay for the detection of antibodies to HIV-1 and HIV-2.
7D2243 Chase buffer is required for whole blood testing.

Kit contains:
• 2 HIV-1/2 recombinant antigen and synthetic peptide coated test cards.

Σ 20 REF 7D2342
IVD 2°C–30°C

ES
Para uso en diagnóstico *in vitro*.
Alere Determine™ HIV-1/2 es un inmunoanálisis cualitativo de lectura visual para la detección de anticuerpos antiVIH-1/VIH-2.
7D2243 Se requiere buffer de detección para todas las pruebas por sangre.

Contenido del equipo:
2 tarjetas de ensayo recubiertas de antígeno recombinante del VIH-1/VIH-2 y de péptidos sintéticos.

FR
Pour diagnostic *in vitro*.
Alere Determine™ HIV-1/2 est un dosage immunologique qualitatif, à lecture visuelle, pour la détection des anticorps dirigés contre le VIH-1 et le VIH-2.
La solution tampon de migration 7D2243 est nécessaire pour tester les échantillons de sang total.

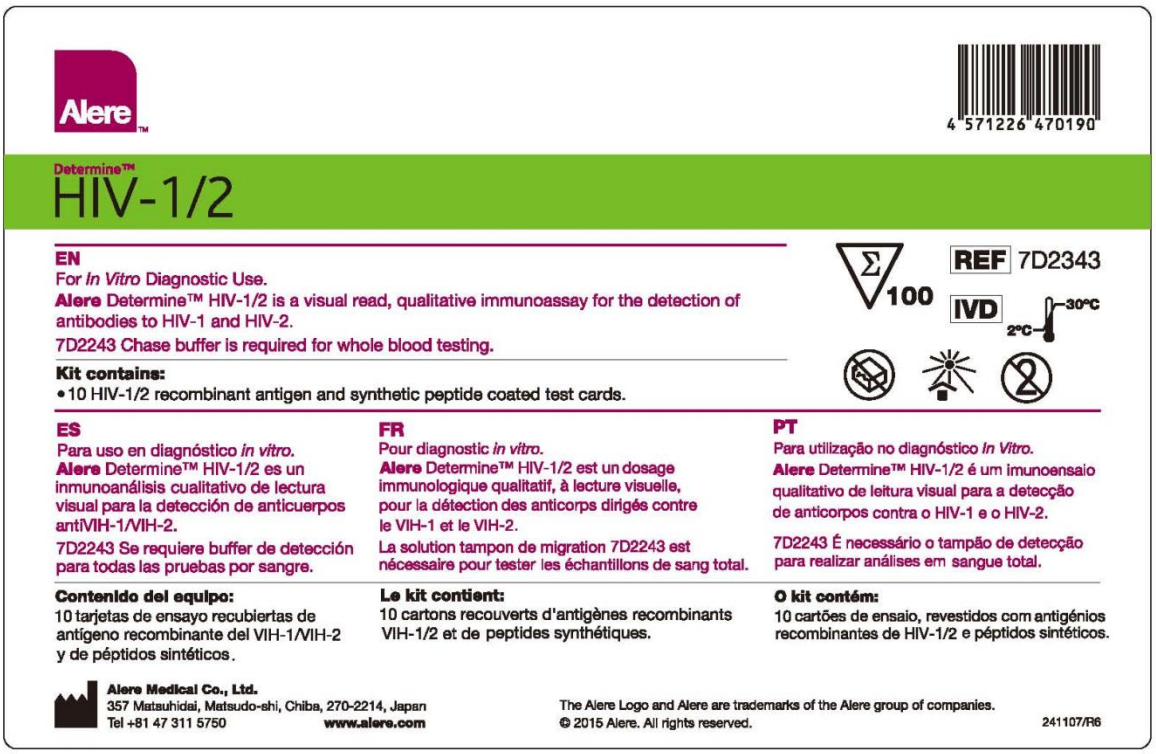
Le kit contient:
2 cartons recouverts d'antigènes recombinants VIH-1/2 et de peptides synthétiques.

PT
Para utilização no diagnóstico *In Vitro*.
Alere Determine™ HIV-1/2 é um imunoensaio qualitativo de leitura visual para a detecção de anticorpos contra o HIV-1 e o HIV-2.
7D2243 É necessário o tampão de detecção para realizar análises em sangue total.

O kit contém:
2 cartões de ensaio, revestidos com antigénios recombinantes de HIV-1/2 e péptidos sintéticos.

Alere Medical Co., Ltd.
357 Matsuhidai, Matsudo-shi, Chiba, 270-2214, Japan
Tel +81 47 311 5750 **www.alere.com**

241106/R6



Alere

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Determine™
HIV-1/2

EN
For *In Vitro* Diagnostic Use.
Alere Determine™ HIV-1/2 is a visual read, qualitative immunoassay for the detection of antibodies to HIV-1 and HIV-2.
7D2243 Chase buffer is required for whole blood testing.

Kit contains:
• 10 HIV-1/2 recombinant antigen and synthetic peptide coated test cards.

Σ 100 REF 7D2343
IVD 2°C–30°C

ES
Para uso en diagnóstico *in vitro*.
Alere Determine™ HIV-1/2 es un inmunoanálisis cualitativo de lectura visual para la detección de anticuerpos antiVIH-1/VIH-2.
7D2243 Se requiere buffer de detección para todas las pruebas por sangre.

Contenido del equipo:
10 tarjetas de ensayo recubiertas de antígeno recombinante del VIH-1/VIH-2 y de péptidos sintéticos.

FR
Pour diagnostic *in vitro*.
Alere Determine™ HIV-1/2 est un dosage immunologique qualitatif, à lecture visuelle, pour la détection des anticorps dirigés contre le VIH-1 et le VIH-2.
La solution tampon de migration 7D2243 est nécessaire pour tester les échantillons de sang total.

Le kit contient:
10 cartons recouverts d'antigènes recombinants VIH-1/2 et de peptides synthétiques.

PT
Para utilização no diagnóstico *In Vitro*.
Alere Determine™ HIV-1/2 é um imunoensaio qualitativo de leitura visual para a detecção de anticorpos contra o HIV-1 e o HIV-2.
7D2243 É necessário o tampão de detecção para realizar análises em sangue total.

O kit contém:
10 cartões de ensaio, revestidos com antigénios recombinantes de HIV-1/2 e péptidos sintéticos.

Alere Medical Co., Ltd.
357 Matsuhidai, Matsudo-shi, Chiba, 270-2214, Japan
Tel +81 47 311 5750 **www.alere.com**

241107/R6


Determine™
HIV-1/2 SET
100 Test
REF 7D2343SET
IVD
100
2°C - 30°C
Alere
Determine™ HIV-1/2 SET
Intended use:
The Alere Determine™ HIV-1/2 is an in Vitro, visually read, qualitative immunoassay for the detection of antibodies to HIV-1 and HIV-2 in human whole blood. The test is intended as an aid to detect antibodies to HIV-1/HIV-2 from infected individuals.
Alere Determine™ HIV-1/2 SET
Lot
Exp.
Contents:
Manufacturing Date Intl :
- Alere Determine™ HIV-1/2 (100 tests)
- Chase Buffer (1 bottle)
- EDTA Capillary Tubes (100 EA)
- Blood Lancets (sterilized) (100 EA)
Alere Medical Co., Ltd.
397 Matsuhidai, Matsudo-shi,
Chiba 270-2214, Japan
+81 47 311 5795
www.alere.com
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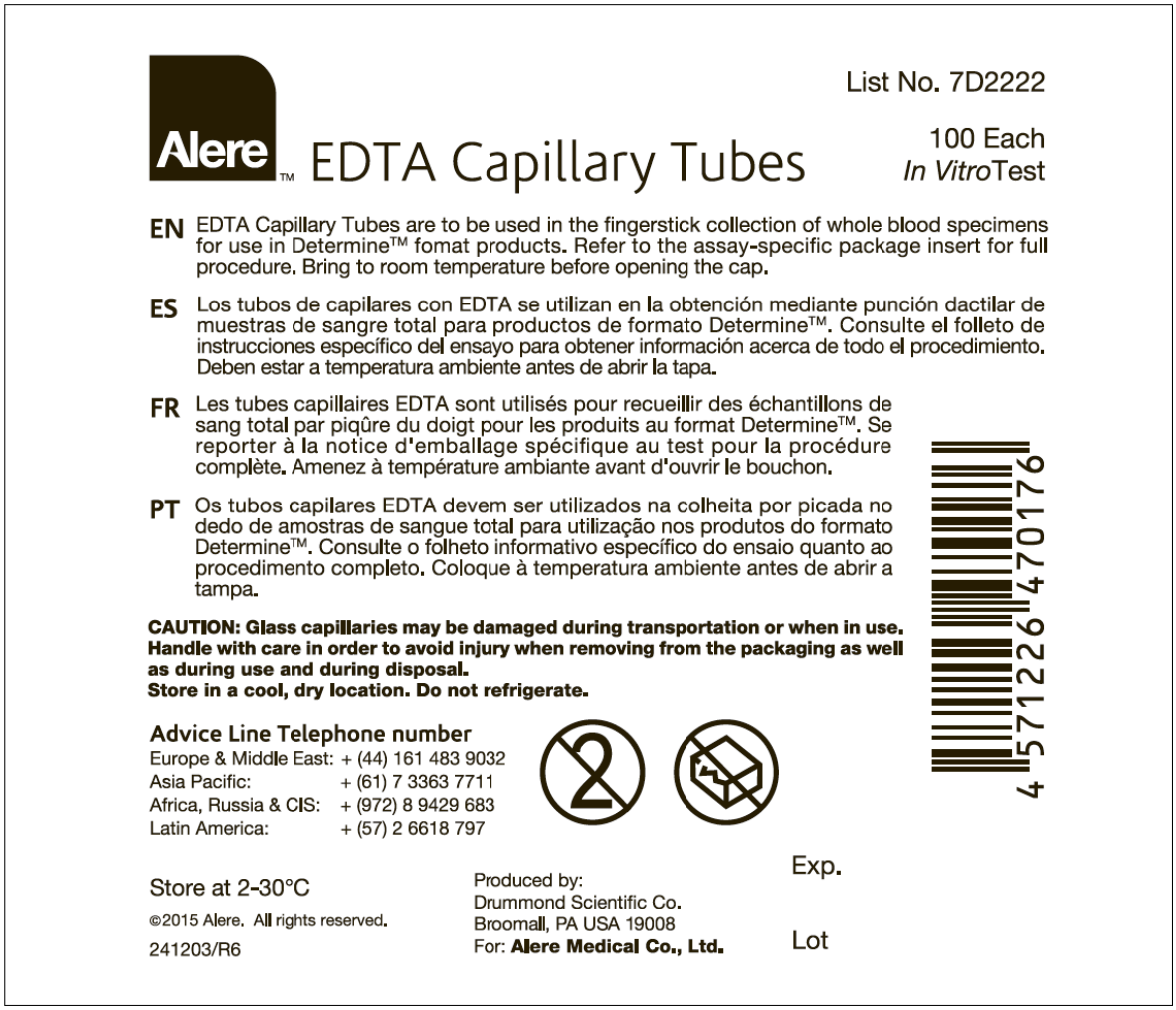
Alere™ EDTA Capillary Tubes
List No. 7D2222
100 Each
In Vitro Test
EN EDTA Capillary Tubes are to be used in the fingerstick collection of whole blood specimens for use in Determine™ fomat products. Refer to the assay-specific package insert for full procedure. Bring to room temperature before opening the cap.
ES Los tubos de capilares con EDTA se utilizan en la obtención mediante punción dactilar de muestras de sangre total para productos de formato Determine™. Consulte el folleto de instrucciones específico del ensayo para obtener información acerca de todo el procedimiento. Deben estar a temperatura ambiente antes de abrir la tapa.
FR Les tubes capillaires EDTA sont utilisés pour recueillir des échantillons de sang total par piqûre du doigt pour les produits au format Determine™. Se reporter à la notice d'emballage spécifique au test pour la procédure complète. Amenez à température ambiante avant d'ouvrir le bouchon.
PT Os tubos capilares EDTA devem ser utilizados na colheita por picada no dedo de amostras de sangue total para utilização nos produtos do formato Determine™. Consulte o folheto informativo específico do ensaio quanto ao procedimento completo. Coloque à temperatura ambiente antes de abrir a tampa.
CAUTION: Glass capillaries may be damaged during transportation or when in use. Handle with care in order to avoid injury when removing from the packaging as well as during use and during disposal.
Store in a cool, dry location. Do not refrigerate.
Advice Line Telephone number
Europe & Middle East: + (44) 161 483 9032
Asia Pacific: + (61) 7 3363 7711
Africa, Russia & CIS: + (972) 8 9429 683
Latin America: + (57) 2 6618 797
4 571226 470176
Store at 2-30°C
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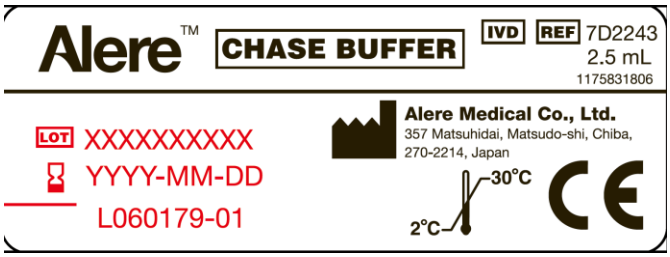
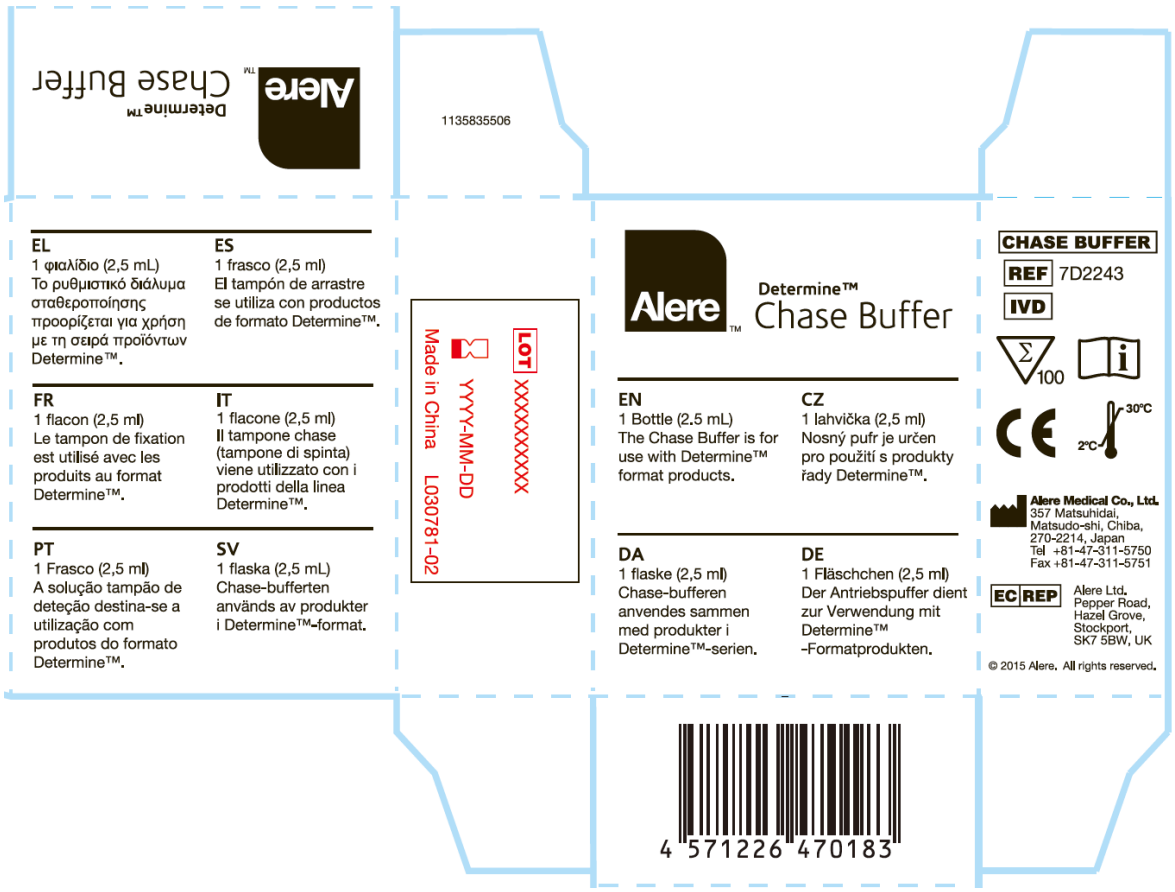
241203/R6
Produced by:
Drummond Scientific Co.
Broomall, PA USA 19008
For: Alere Medical Co., Ltd.
Exp.
Lot


Alere™
CHASE BUFFER
IVD
REF 7D2243
2.5 mL
1175831806
LOT XXXXXXXXXX
YYYY-MM-DD
L060179-01
Alere Medical Co., Ltd.
357 Matsuhidai, Matsudo-shi, Chiba,
270-2214, Japan
30°C
2°C
CE


Alere™ Determine™ Chase Buffer
1135835506
EL
1 φιαλίδιο (2,5 mL)
Το ρυθμιστικό διάλυμα σταθεροποίησης προορίζεται για χρήση με τη σειρά προϊόντων Determine™.
ES
1 frasco (2,5 ml)
El tampón de arrastre se utiliza con productos de formato Determine™.
FR
1 flacon (2,5 ml)
Le tampon de fixation est utilisé avec les produits au format Determine™.
IT
1 flacone (2,5 ml)
Il tampone chase (tampone di spinta) viene utilizzato con i prodotti della linea Determine™.
PT
1 Frasco (2,5 ml)
A solução tampão de deteção destina-se a utilização com produtos do formato Determine™.
SV
1 flaska (2,5 mL)
Chase-bufferten används av produkter i Determine™-format.
LOT XXXXXXXXXX
YYYY-MM-DD
Made in China L030781-02
Alere™ Determine™ Chase Buffer
EN
1 Bottle (2.5 mL)
The Chase Buffer is for use with Determine™ format products.
CZ
1 lahvička (2,5 ml)
Nosný pufr je určen pro použití s produkty řady Determine™.
DA
1 flaske (2,5 ml)
Chase-bufferen anvendes sammen med produkter i Determine™-serien.
DE
1 Fläschchen (2,5 ml)
Der Antriebspuffer dient zur Verwendung mit Determine™ -Formatprodukten.
CHASE BUFFER
REF 7D2243
IVD
Σ 100
CE
30°C
2°C
Alere Medical Co., Ltd.
357 Matsuhidai,
Matsudo-shi, Chiba,
270-2214, Japan
Tel +81-47-311-5750
Fax +81-47-311-5751
EC REP
Alere Ltd,
Pepper Road,
Hazel Grove,
Stockport,
SK7 5BW, UK
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2. Instructions for use

REF 7D2342, 7D2343 October 2015
241228/R10

Alere™ Determine™ HIV-1/2

EN

Key to symbols used

REF Catalogue Number	Contains Sufficient for 20 tests	Keep away from sunlight
IVD *In Vitro* Diagnostic Medical Device	Contains Sufficient for 100 tests	Do not reuse
2°C–30°C Store at 2-30°C	Do not use if package is damaged	

This package insert must be read carefully prior to use. Package insert instructions must be followed accordingly.
Reliability of assay results cannot be guaranteed if there are deviations from the instructions in this package insert.

NAME AND INTENDED USE
The **Alere** Determine™ HIV-1/2 is an *In Vitro*, visually read, qualitative immunoassay for the detection of antibodies to HIV-1 and HIV-2 in human serum, plasma or whole blood. The test is intended as an aid to detect antibodies to HIV-1/HIV-2 from infected individuals.

SUMMARY AND EXPLANATION OF THE TEST
AIDS (Acquired Immunodeficiency Syndrome) is characterized by changes in the population of T-cell lymphocytes. In an infected individual, the virus causes depletion of helper T-cells, which leaves the person susceptible to opportunistic infections and some malignancies. The virus that causes AIDS exists as two related types known as HIV-1 and HIV-2.
The presence of the AIDS virus elicits the production of specific antibodies to either HIV-1 or HIV-2.[1,2,3]

BIOLOGICAL PRINCIPLES OF THE PROCEDURE
Alere Determine™ HIV-1/2 is an immunochromatographic test for the qualitative detection of antibodies to HIV-1 and HIV-2.
Sample is added to the sample pad. As the sample migrates through the conjugate pad, it reconstitutes and mixes with the selenium colloid-antigen conjugate. This mixture continues to migrate through the solid phase to the immobilized recombinant antigens and synthetic peptides at the patient window site.
If antibodies to HIV-1 and/or HIV-2 are present in the sample, the antibodies bind to the antigen-selenium colloid and to the antigen at the patient window, forming a red line at the patient window site.
If antibodies to HIV-1 and/or HIV-2 are absent, the antigen-selenium colloid flows past the patient window, and no red line is formed at the patient window site.
To insure assay validity, a procedural control bar is incorporated in the assay device.

CONTENTS
Alere Determine™ HIV-1/2 Serum/Plasma Assay, 20 Tests (7D2342) or 100 Tests (7D2343)
- **Alere** Determine™ HIV-1/2 Test Card, 2 cards or 10 cards (10 tests/card), HIV-1/2 recombinant antigen and synthetic peptide coated.

ACCESSORIES (required but not provided)
For testing Whole Blood samples
- 1 Bottle (2.5 mL) Chase Buffer (7D2243) prepared in phosphate buffer. Preservatives: Antimicrobial Agents.

Whole Blood (fingerstick assay)
- EDTA Capillary Tubes (7D2222)

Materials Required But Not Provided
Disposable gloves, timing device
Micropipette capable of delivering 50 µL (other than fingerstick)
Alcohol swab, gauze pad, Lancet (for fingerstick)

WARNINGS AND PRECAUTIONS
For *In Vitro* Diagnostic Use.

CAUTION:
Appropriate biosafety practices[4,5] should be used when handling specimens and reagents. These precautions include, but are not limited to the following:
- **Wear gloves.**
- **Do not pipette by mouth.**
- **Do not eat, drink, smoke, apply cosmetics, or handle contact lenses in areas where these materials are handled.**
- **Clean and disinfect all spills of specimens or reagents using a suitable disinfectant, such as 0.5% sodium hypochlorite.[4,7]**
- **Decontaminate and dispose of all specimens, reagents, and other potentially contaminated materials in accordance with local regulations.[4,9]**

STORAGE
The **Alere** Determine™ HIV-1/2 Test Cards and Chase Buffer must be stored at 2-30°C until expiration date. Kit components are stable until expiration date when handled and stored as directed. Do not use kit components beyond expiration date.
Immediately reseal all unused tests in the foil pouch containing the desiccant by pressing seal from end to end to close.

SPECIMEN COLLECTION
Serum, Plasma, and Whole Blood Collection by Venipuncture
Human serum, plasma, and whole blood collected by venipuncture should be collected aseptically in such a way as to avoid hemolysis.
NOTE: For whole blood and plasma specimens, EDTA collection tubes must be used.

Whole Blood Collection by Fingerstick[10]
Before collecting a fingerstick specimen, place an EDTA capillary tube on a clean dry surface.

1. Choose the fingertip of the middle, ring, or index finger (whichever is the least callused) for adults and children older than one year. Warm the hand as needed with a warm, moist towel or warm water to increase blood flow.
2. Clean fingertip with alcohol; allow to air dry. Position the hand palm-side up.

3. Use a new lancet for each person. Place the lancet off-center on the fingertip. Firmly press the lancet against the finger and puncture the skin. Dispose of the lancet in an appropriate biohazard sharps container.
4. Wipe away the first drop of blood with a sterile gauze pad.

5. Hold the finger lower than the elbow and apply gentle, intermittent pressure to the base of the punctured finger several times. Touch the tip of the EDTA Capillary Tube to the drop of blood*. Avoid air bubbles.

*If EDTA Capillary Tubes (7D2222) will be used, fill the tube with blood between the 2 marked lines (50 µL).

SPECIMEN STORAGE
- Serum and plasma specimens should be stored at 2-8°C if the test is to be run within 7 days of collection. If testing is delayed more than 7 days, the specimen should be frozen (-20°C or colder).
- Whole blood collected by venipuncture should be stored at 2-8°C if the test is to be run within 7 days of collection.
  Do not freeze whole blood specimens.
- Whole blood collected by fingerstick should be tested immediately.

TEST PROCEDURE
The desired number of test units from the 10-test card can be removed by bending and tearing at the perforation.

NOTES:
- **Removal of the test units should start from the right side of the test card to preserve the lot number which appears on the left side of the test card.**
- **Assay should be initiated within 2 hours after removing the protective foil cover from each test.**

1. Remove the protective foil cover from each test.
2. For serum or plasma samples:
   a. Apply 50 µL of sample (precision pipette) to the sample pad (marked by the arrow symbol).
   b. Wait a minimum of 15 minutes (up to 60 minutes) and read result.
3. For whole blood (venipuncture) samples:
   a. Apply 50 µL of sample (precision pipette) to the sample pad (marked by the arrow symbol).
   b. Wait one minute, then apply one drop of Chase Buffer to the sample pad.
   c. Wait a minimum of 15 minutes (up to 60 minutes) and read result.
4. For whole blood (fingerstick) samples:
   a. Apply 50 µL of sample (by EDTA capillary tube) to the sample pad (marked by the arrow symbol).
   b. Wait until blood is absorbed into the sample pad, then apply one drop of Chase Buffer to the sample pad.
   c. Wait a minimum of 15 minutes (up to 60 minutes) and read result.

QUALITY CONTROL

To insure assay validity, a procedural control is incorporated in the device and is labeled "Control". If the control bar does not turn red by assay completion, the test result is invalid and the sample should be retested.

INTERPRETATION OF RESULTS

POSITIVE (Two Bars)

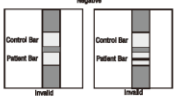
Red bars appear in both the control window (labeled "Control") and the patient window (labeled "Patient") of the strip. Any visible red bar in the patient window should be interpreted as positive.

NEGATIVE (One Bar)

One red bar appears in the control window of the strip (labeled "Control"), and no red bar appears in the patient window of the strip (labeled "Patient").

INVALID (No Bar)

If there is no red bar in the control window of the strip, and even if a red bar appears in the patient window of the strip, the result is invalid and should be repeated.



NOTES:

- The test result is positive even if the patient bar appears lighter or darker than the control bar.
- The control bar may exhibit a weak intensity for some patient samples, particularly those with high titer HIV.
- Upon appearance of a red bar in the control window, no matter how faint, the test result is considered valid.
- If an invalid test result occurs repeatedly, or for technical assistance, contact your local distributor or call Technical Support.

LIMITATIONS OF THE PROCEDURE

- The **Alere** Determine™ HIV - 1/2 test is designed to detect antibodies to HIV - 1 and HIV - 2 in human serum, plasma, and whole blood. Other body fluids or pooled specimens may not give accurate results.
- The intensity of the patient bar does not necessarily correlate to the titer of antibody in the specimen.
- A negative result with **Alere** Determine™ HIV-1/2 does not exclude the possibility of infection with HIV. A false negative result can occur in the following circumstances:
  - low levels of antibody (e.g., early seroconversion specimens) are below the detection limit of the test
  - infection with a variant of the virus that is less detectable by the **Alere** Determine™ HIV-1/2 assay configuration
  - HIV antibodies in the patient that do not react with specific antigens utilized in the assay configuration
  - specimen handling conditions which result in loss of HIV antibody multivalency
  - HIV-infected persons taking antiretroviral medication [11,12,13]

For these reasons care should be taken in interpreting negative results. Other clinical data (e.g., symptoms or risk factors) should be used in conjunction with the test results.

- Positive specimens should be retested using another method and the results should be evaluated in light of the overall clinical evaluation before a diagnosis is made.
- Whole blood or plasma specimens containing anticoagulants other than EDTA may give incorrect results.
- Neonates of HIV-infected mothers may carry maternal antibodies to HIV for up to around eighteen months, which may not necessarily indicate the true infection status of the new born.

PERFORMANCE CHARACTERISTICS

SPECIFICITY

A total of 1594 serum and plasma specimens from Asia, West Africa, and North America were tested by **Alere** Determine™ HIV-1/2 and a commercially available test (Table I).

Table I
Specificity of Alere Determine™ HIV-1/2

Population	Number of Specimens Tested	Negative by Alere Determine™ HIV-1/2	Negative by a Commercially Available Test***
Seronegative			
Serum	908	907/908 (99.89%)	908/908 (100.00%)
Plasma	403	403/403 (100.00%)	403/403 (100.00%)
Pregnant			
Females	58*	57/57 (100.00%)	57/57 (100.00%)
West Africans	49	48/49 (97.96%)	48/49 (97.96%)
Disease States Other than HIV and Potentially Interfering Substances	176*	173/175 (98.86%)	174/175 (99.45%)
Total	1594**	1588/1592 (99.75%)	1590/1592 (99.87%)

* One specimen from a pregnant female and an HCV positive patient were positive by both **Alere** Determine™ HIV-1/2 and the commercially available test. Both specimens confirmed positive by HIV-1 Western Blot.

** 456 specimens were from North America, 1089 specimens were from Asia, and 49 specimens were from Africa.

*** The reference method of a commercially available test is particle agglutination.

A total of 3663 seronegative serum and plasma specimens from North America, Asia, and Africa were tested by **Alere** Determine™ HIV-1/2 and commercially available tests (Table II). The specimens from North America, Asia, and 49 of 2118 specimens from Africa (referred to as "West Africans" in Table I) were included in Table I. Discordant specimens were confirmed negative by either Western blot or HIV-1 PCR assays.

Table II
A Comparison of Alere Determine™ HIV-1/2 Specificity by Geographic Area

Area	Number of Specimens Tested	Negative by Alere Determine™ HIV-1/2	Negative by Commercially Available Tests*
North America	456	451/454 (99.34%)	453/454 (99.78%)
Asia	1089	1089/1089 (100.00%)	1089/1089 (100.00%)
Africa	2118	2079/2118 (98.16%)	2100/2118 (99.15%)

* The reference methods of commercially available tests are particle agglutination, enzyme immunoassay and chemiluminescent immunoassay.

A total of 368 seronegative whole blood specimens from Thailand were tested with paired serum and plasma by **Alere** Determine™ HIV-1/2. Thirty-nine of the whole blood specimens were collected by both venipuncture and fingerstick (Table III).

Table III
A Comparison of Alere Determine™ HIV-1/2 Specificity in Seronegative Whole Blood and Paired Serum and Plasma Specimens

Specimen Type	Number of Specimens Tested	Negative by Alere Determine™ HIV-1/2
Serum	368	368/368 (100.00%)
Plasma	368	368/368 (100.00%)
Whole Blood (venipuncture)	368	368/368 (100.00%)
Whole Blood (fingerstick)	39	39/39 (100.00%)

SENSITIVITY

A total of 869 HIV-1 and HIV-2 antibody positive serum and plasma specimens from Asia, Africa, North and South America were tested by **Alere** Determine™ HIV-1/2 and a commercially available test (Table IV).

Table IV
Sensitivity of Alere Determine™ HIV-1/2

Population	Number of Specimens Tested	Positive by Alere Determine™ HIV-1/2	Positive by a Commercially Available Test**
HIV-1 Positive	521*	521/521 (100.00%)	521/521 (100.00%)
HIV-2 Positive	114*	114/114 (100.00%)	114/114 (100.00%)
HIV-1 Subtypes A-G	222	222/222 (100.00%)	Not Tested Not Tested
HIV-1 Group O	12	12/12 (100.00%)	Not Tested Not Tested
Total	869	869/869 (100.00%)	635/635 (100.00%)

* 228 specimens were from North America, 296 specimens were from Asia, and 111 specimens were from Africa.

** The reference method of a commercially available test is particle agglutination.

A total of 1653 seropositive serum and plasma specimens from North America, Asia, and Africa were tested by **Alere** Determine™ HIV-1/2 and commercially available tests (Table V). The specimens from North America, Asia, and 111 of 1129 specimens from Africa (referred to as "HIV-2 Positive" in Table IV) were included in Table IV. Discordant specimens were confirmed HIV-1 positive by either Western blot or HIV-1 PCR assays.

Table V
A Comparison of Alere Determine™ HIV-1/2 Sensitivity by Geographic Area

Area	Number of Specimens Tested	Positive by Alere Determine™ HIV-1/2	Positive by Commercially Available Tests**
North America	228	228/228 (100.00%)	228/228 (100.00%)
Asia	296	296/296 (100.00%)	296/296 (100.00%)
Africa	1129	1128*/1129 (99.91%)	1129/1129 (100.00%)

* One negative specimen by **Alere** Determine™ HIV-1/2 confirmed positive by HIV-1 PCR.

** The reference methods of commercially available tests are particle agglutination, enzyme immunoassay and chemiluminescent immunoassay.

A total of 102 seropositive whole blood specimens from Thailand were tested with paired serum and plasma by **Alere** Determine™ HIV-1/2. Thirty-two of the whole blood specimens were collected by both venipuncture and fingerstick (Table VI).

Table VI
A Comparison of Alere Determine™ HIV-1/2 Sensitivity in Seropositive Whole Blood and Paired Serum and Plasma Specimens

Specimen Type	Number of Specimens Tested	Positive by Alere Determine™ HIV-1/2
Serum	102	102/102 (100.00%)
Plasma	102	102/102 (100.00%)
Whole Blood (venipuncture)	102	102/102 (100.00%)
Whole Blood (fingerstick)	32	32/32 (100.00%)

The manufacturing process produces different lot numbers for the kit and test cards; these lot numbers are traceable.

BIBLIOGRAPHY

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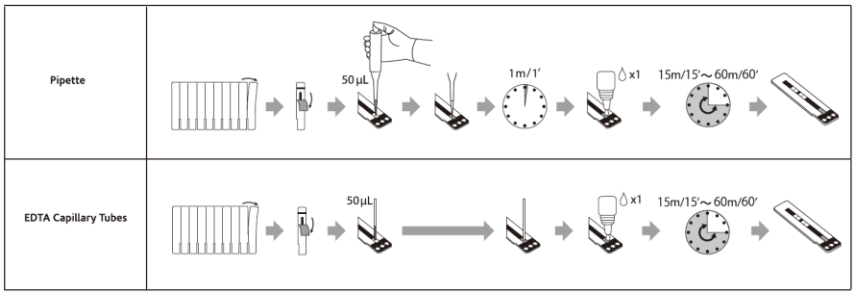
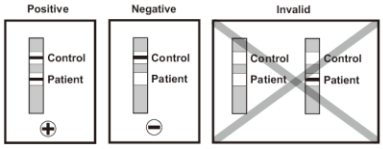
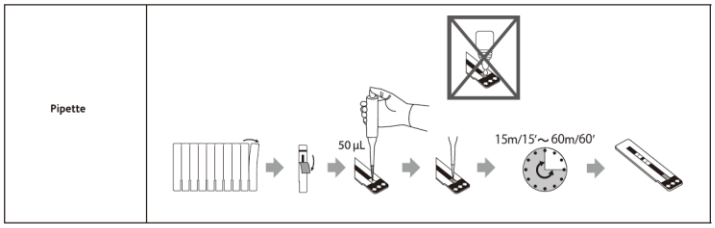
Whole Blood





Serum, Plasma



Advice Line

For further information, please contact your distributor, or call to one of the following Alere Product Support Care Centers:

Region	Phone	E-Mail Address
Europe & Middle East	+ (44) 161 483 9032	EMEproductsupport@alere.com
Asia Pacific	+ (61) 7 3363 7711	APproductsupport@alere.com
Africa, Russia & CIS	+ (972) 8 9429 683	ARCISproductsupport@alere.com
Latin America	+ (57) 2 661 8797	LAproductsupport@alere.com

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Chiba, 270-2214 Japan
www.alere.com **www.alerehiv.com** Tel +81 47 311 5750

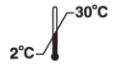
1155943205

REF 7D2243

Alere™

Determine™ Chase Buffer

Key to symbols used/Používané symboly/Symbolforklaring/Erläuterung der verwendeten Symbole/
Πίνακας συμβόλων/Clave de los símbolos utilizados/Légende des symboles utilisés/
Legenda dei simboli utilizzati/Legenda dos símbolos utilizados/Symbolförklaring



Store at 2-30°C/Skladujte při teplotě 2-30°C/
Opbevares ved 2-30°C/Lagerung bei 2 bis 30°C/
Φυλάσσεται στους 2-30°C/Almacenar a 2-30°C/
Conserver entre 2 et 30°C/Conservare a 2-30°C/
Conservar a 2°C-30°C/Förvaras vid 2-30°C

CHASE BUFFER — Chase Buffer/Nosný pufr/
Chase-buffer/Antriebspuffer/
Ρυθμιστικό διάλυμα σταθεροποίησης/
Tampón de arrastre/Tampon de fixation/
Tampone chase/Tampão de fixação/
Fixeringsbuffert

IVD — *For In Vitro* Diagnostic Use/Pro diagnostické účely *in vitro*/
Til in vitro-diagnostisk brug/
Der Test ist nur für die In-vitro-Diagnos vorgesehen/
Για *in vitro* διαγνωστική χρήση/Para uso en diagnósticos *in vitro*/
Pour usage diagnostic *in vitro*/Per uso diagnostico *In vitro*/
Para uso em Diagnóstico *In Vitro*/För diagnostisk användning *in vitro*

EN

Name and Intended Use
The Chase Buffer is for use with Determine™ format products.
Refer to the assay-specific package insert for additional information.
When adding Chase Buffer to the sample pad, hold the bottle vertically.
One bottle of Chase Buffer can be used for 100 tests.

Contents
CHASE BUFFER 1 Bottle (2.5 mL) Chase Buffer prepared in phosphate buffer.
Preservatives: Antimicrobial Agents.

Storage Instruction
Recap and store the chase buffer at 2-30°C to avoid evaporation or spillage.

Advice Line
For further information, please contact your distributor, or call Alere Technical Specialists:

Africa, Russia & CIS: Tel: +972 8 9429 683
Email: ARCISproductsupport@alere.com

Asia Pacific: Tel: +61 7 3363 7711
Email: APproductsupport@alere.com

Europe & Middle East: Tel: +44 161 483 9032
Email: EMEproductsupport@alere.com

Latin America: Tel: +57 2 661 8797
Email: LAproductsupport@alere.com

CZ

Název a použití
Nosný pufr je určen pro použití s produkty řady Determine™.
Další informace naleznete v příbalovém letáku příslušné metody.
Při přidávání pufru do testovací kazety držte lahvičku ve vertikální poloze.
Jedna lahvička pufru vystačí na 100 testů.

Složení
CHASE BUFFER 1 lahvička (2,5 ml) - nosný pufr připravený ve fosfátovém pufru.
Konzervační činidla: antimikrobiální látky.

Pokyny pro skladování
Promývací pufr znovu uzavřete, aby nedošlo k jeho odpařování nebo vylití, a skladujte při teplotě 2–30°C.

Informační Linka
Pro další informace prosím kontaktujte svého distributora, nebo volejte Alere Techničtí specialisté:

Africe, Rusku a Společenství nezávislých států: Tel: +972 8 9429 683
Email: ARCISproductsupport@alere.com

Asie a Tichomoří: Tel: +61 7 3363 7711
Email: APproductsupport@alere.com

Evropa a Střední Východ: Tel: +44 161 483 9032
Email: EMEproductsupport@alere.com

Latinská Amerika: Tel: +57 2 661 8797
Email: LAproductsupport@alere.com

DA

Betegnelse og anvendelse
Chase-bufferen anvendes sammen med produkter i Determine™-serien.
Se brugsanvisningen til den pågældende analyse for yderligere oplysninger.
Hold flasken lodret, når Chase Buffer påføres prøvefeltet.
En flaske Chase Buffer kan bruges til 100 tests.

Indhold
CHASE BUFFER 1 flaske (2,5 ml) chase-buffer i fosfatbuffer.
Konserveringsmiddel: antimikrobielle midler.

Opbevaringsinstruktion
Sæt hætte på og opbevar chase-bufferen ved 2-30°C for at undgå fordampning eller spild.

Rådgivning
Yderligere oplysninger fas ved at kontakte forhandleren eller ringe til Alere Technical Specialists:

Afrika, Rusland og CIS: Tlf.: +972 8 9429 683
E-mail: ARCISproductsupport@alere.com

Asien/Stillehavet: Tlf.: +61 7 3363 7711
E-mail: APproductsupport@alere.com

Europa og Mellemøsten: Tlf.: +44 161 483 9032
E-mail: EMEproductsupport@alere.com

Latinamerika: Tlf.: +57 2 661 8797
E-mail: LAproductsupport@alere.com

DE

Produktbezeichnung und Verwendungszweck
Der Antriebspuffer dient zur Verwendung mit Determine™-Formatprodukten.
Weitere Informationen entnehmen Sie bitte der entsprechenden Packungsbeilage.
Halten Sie die Flasche Antriebspuffer senkrecht, wenn Sie den Puffer auf das Proben-Pad geben.
Eine Flasche Antriebspuffer kann für 100 Tests verwendet werden.

Inhalt
CHASE BUFFER 1 Fläschchen (2,5 ml) Antriebspuffer, hergestellt in Phosphatpuffer.
Konservierungsmittel: Bakteriostatika.

Lagerungsvorschriften
Verschließen Sie den Chase Buffer wieder und lagern Sie ihn bei 2-30°C, um Verdunstung oder Verschütten zu vermeiden.

Infotelefon
Weitere Informationen erhalten Sie von Ihrem Vertreiber oder vom technischen Kundendienst von Alere:

Afrika, Russland & GUS: Tel: +972 8 9429 683
E-Mail: ARCISproductsupport@alere.com

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E-Mail: EMEproductsupport@alere.com

Lateinamerika: Tel: +57 2 661 8797
E-Mail: LAproductsupport@alere.com

EL

Ονομασία και σκοπός χρήσης
Το ρυθμιστικό διάλυμα σταθεροποίησης προορίζεται για χρήση με τη σειρά προϊόντων Determine™.
Ανατρέξτε στο αντίστοιχο συνοδευτικό φυλλάδιο κάθε εξέτασης για περισσότερες πληροφορίες.
Κατά την προσθήκη ρυθμιστικού διαλύματος Chase Buffer στο χώρο υποδοχής του δείγματος, κρατάτε τη φιάλη κατακόρυφη.
Μία φιάλη ρυθμιστικού διαλύματος Chase Buffer επαρκεί για 100 τεστ.

Περιεχόμενα
CHASE BUFFER 1 φιαλίδιο (2,5 mL) ρυθμιστικού διαλύματος σταθεροποίησης που παρασκευάζεται σε ρυθμιστικό διάλυμα φωσφωρικού άλατος.
Συντηρητικά: αντιμικροβιακοί παράγοντες.

Οδηγίες αποθήκευσης
Επιπωματίστε εκ νέου και φυλάξτε το ρυθμιστικό διάλυμα chase σε θερμοκρασία 2-30°C για την αποφυγή της εξάτμισης ή της διαρροής.

Γραμμή βοήθειας
Για περισσότερες πληροφορίες επικοινωνήστε με τον τοπικό διανομέα του προϊόντος, ή καλέστε το Εξειδικευμένο Τεχνικό Ιατρικό Προσωπικό της Alere:
Αφρική, Ρωσία και & ΚΑΚ: Τηλ: +972 8 9429 683
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Email: EMEproductsupport@alere.com
Λατινική Αμερική: Τηλ: +57 2 661 8797
Email: LAproductsupport@alere.com

ES

Nombre y finalidad de uso
El tampón de arrastre se utiliza con productos de formato Determine™.
Si desea más información, consulte el prospecto del ensayo correspondiente.
Sostenga el bote en posición vertical cuando añada el tampón de detección Chase Buffer a la almohadilla de muestra.
Un bote de tampón de detección Chase Buffer se puede utilizar para 100 pruebas.

Contenido:
CHASE BUFFER 1 frasco (2,5 ml) de tampón de arrastre preparado en tampón fosfato.
Conservantes: agentes antimicrobianos.

Instrucciones de almacenamiento
Vuelva a tapar y almacene el buffer de detección a 2-30°C para evitar evaporaciones o derrames.

Asistencia
Para obtener mas informacion, pongase en contacto con su distribuidor, o llame a los especialistas tecnicos de Alere:
Africa, Rusia y CIS: Tel: +972 8 9429 683
Correo electronico: ARCISproductsupport@alere.com
Asia del Pacifico: Tel: +61 7 3363 7711
Correo electronico: APproductsupport@alere.com
Europa y Oriente Medio: Tel: +44 161 483 9032
Correo electronico: EMEproductsupport@alere.com
Latinoamerica: Tel: +57 2 661 8797
Correo electronico: LAproductsupport@alere.com

FR

Dénomination et domaine d'application
Le tampon de fixation est utilisé avec les produits au format Determine™.
Pour de plus amples informations, se référer à la notice de dosage correspondante.
Au moment de déposer le tampon de migration sur la zone de dépôt, maintenir le flacon à la verticale.
Un flacon de tampon de migration est suffisant pour la réalisation de 100 tests.

Contenu
CHASE BUFFER 1 flacon (2,5 ml) de tampon de fixation préparé dans du tampon phosphate.
Conservateurs : Agents antimicrobiens.

Consignes de conservation
Refermez et conservez la solution tampon de migration entre 2 et 30°C pour prévenir toute évaporation ou tout déversement.

Conseil
Pour de plus amples informations, contacter votre distributeur ou appeler les techniciens specialistes de Alere:
Afrique, Russie et Ex-pays de l'URSS: Tel: +972 8 9429 683
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Asie et Pacifique: Tel: +61 7 3363 7711
Adresse elec.e: APproductsupport@alere.com
Europe et Moyen-Orient: Tel: +44 161 483 9032
Adresse elec.e: EMEproductsupport@alere.com
Amerique latine: Tel: +57 2 661 8797
Adresse elec.e: LAproductsupport@alere.com

IT

Denominazione e finalità d'uso
Il tampone chase (tampone di spinta) viene utilizzato con i prodotti della linea Determine™.
Per specifiche più dettagliate, fare riferimento al foglietto illustrativo del relativo dosaggio.
Quando si aggiunge il Chase Buffer al supporto assorbente del campione, tenere il flacone in posizione verticale.
Un flacone di tampone è sufficiente per 100 test.

Contenuto
CHASE BUFFER 1 flacone (2,5 ml) di tampone chase (tampone di spinta) preparato in tampone fosfato.
Conservanti: Sostanze antimicrobiche.

Istruzioni di conservazione
Richiudere e conservare il tampone chase (tampone di migrazione) a 2-30°C per evitare l'evaporazione o la fuoriuscita.

Assistenza
Per ulteriori informazioni, contattare il proprio distributore o il servizio di assistenza tecnica di Alere ai seguenti recapiti:
Africa, Russia e CIS: Tel.: +972 8 9429 683
E-mail: ARCISproductsupport@alere.com
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E-mail: APproductsupport@alere.com
Europa e Medio Oriente: Tel.: +44 161 483 9032
E-mail: EMEproductsupport@alere.com
America Latina: Tel.: +57 2 661 8797
E-mail: LAproductsupport@alere.com

PT

Nome e aplicação diagnóstica
A solução tampão de deteção destina-se a utilização com produtos do formato Determine™.
Para mais informações, consultar as instruções de utilização dos ensaios.
Ao adicionar a solução tampão de deteção à área de amostra, segure verticalmente no frasco.
Um frasco de solução tampão de deteção pode ser utilizado para 100 testes.

Conteúdo
CHASE BUFFER 1 Frasco (2,5 ml) de tampão de fixação preparado em tampão fosfato.
Conservantes: agentes antimicrobianos.

Instruções de armazenamento
Volte a colocar a tampa e a armazenar o tampão de deteção entre 2 a 30°C para evitar evaporação ou derrame.

Linha de Apoio
Para informacao adicional, por favor contacte o seu distribuidor, ou ligue para os Tecnicos Especialistas da Alere.
Africa, Russia & CES: Tel: +972 8 9429 683
Email: ARCISproductsupport@alere.com
Asia Pacifico: Tel: +61 7 3363 7711
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Europa & Medio Oriente: Tel: +44 161 483 9032
Email: EMEproductsupport@alere.com
America Latina: Tel: +57 2 661 8797
Email: LAproductsupport@alere.com

SV

Namn och användningsområde
Chase-bufferten används av produkter i Determine™-format.
Ytterligare information finns i bruksanvisningen till respektive analys.
Håll flaskan lodrätt när du tillsätter Chase Buffert till provdynan.
En flaska Chase Buffert räcker till 100 tester.

Innehåll
CHASE BUFFER 1 flaska (2,5 mL) fixeringsbuffert som preparerats i fosfatbuffert.
Konserveringsmedel: antimikrobiella agens.

Instruktioner förvaring
Sätt på locket och förvara chase-buffer i 2–30°C för att undvika avdunstning och spill.

Rådgivning
For ytterligare information, vanligen kontakta din leverantor eller Alere Technical Specialists:
Afrika, Ryssland & OSS: Tel: +972 8 9429 683
E-post: ARCISproductsupport@alere.com
Asien Stillahavsomradet: Tel: +61 7 3363 7711
E-post: APproductsupport@alere.com
Europa & Mellanostern: Tel: +44 161 483 9032
E-post: EMEproductsupport@alere.com
Latinamerika: Tel: +57 2 661 8797
E-post: LAproductsupport@alere.com

CE

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