

 **BD BACTEC™ Plus Anaerobic/F Culture Vials**
Soybean-Casein Digest Broth in a Plastic Vial

IVD Rx Only **CE** 8090999(08)
2019-09
English

INTENDED USE

The BD BACTEC™ Plus Anaerobic/F medium is used in a qualitative procedure for the anaerobic culture and recovery of microorganisms (bacteria) from blood. The principal use of this medium is with the BD BACTEC fluorescent series instruments.

SUMMARY AND EXPLANATION

The sample to be tested is inoculated into one or more vials which are inserted into the BD BACTEC fluorescent series instrument for incubation and periodic reading. Each vial contains a chemical sensor which can detect increases in CO₂ produced by the growth of microorganisms. The sensor is monitored by the instrument every ten minutes for an increase in its fluorescence, which is proportional to the amount of CO₂ present. A positive reading indicates the presumptive presence of viable microorganisms in the vial. Detection is limited to microorganisms that will grow in a particular type of medium.

Resins have been described for the treatment of blood specimens both prior to and after their inoculation into culture media. Resins have been incorporated into BD BACTEC culture media to enhance recovery of organisms without a need for special processing.¹⁻⁴

PRINCIPLES OF THE PROCEDURE

If microorganisms are present in the test sample inoculated into the BD BACTEC vial, CO₂ will be produced when the organisms metabolize the substrates present in the vial. Increases in the fluorescence of the vial sensor caused by the higher amount of CO₂ are monitored by the BD BACTEC fluorescent series instrument. Analysis of the rate and amount of CO₂ increase enables the BD BACTEC fluorescent series instrument to determine if the vial is positive, i.e., that the test sample contains viable organisms.

REAGENTS

The BD BACTEC culture vials contain the following reactive ingredients prior to processing:

List of Ingredients	BD BACTEC™ Plus Anaerobic/F (442022)
Processed Water	30 mL w/v
Soybean-Casein Digest Broth	3.0%
Yeast Extract	0.4%
Animal Tissue Digest	0.05%
Amino Acids	0.25%
Sugar	0.25%
Sodium Citrate	0.02%
Sodium Polyanetholsulfonate (SPS)	0.05%
Vitamins	0.0006%
Antioxidants/Reducants	0.16%
Nonionic Adsorbing Resin	13.4%
Cationic Exchange Resin	0.9%

Anaerobic media are pre-reduced and dispensed with CO₂ and N₂. Composition may be adjusted to meet specific performance requirements.

Warnings and Precautions:

The prepared culture vials are for *in vitro* diagnostic use.

This Product Contains Dry Natural Rubber.

Pathogenic microorganisms, including hepatitis viruses and Human Immunodeficiency Virus, may be present in clinical specimens. "Standard Precautions"⁵⁻⁸ and institutional guidelines should be followed in handling all items contaminated with blood and other body fluids.

Prior to use, each vial should be examined for evidence of contamination such as cloudiness, bulging or depressed septum, or leakage. DO NOT USE any vial showing evidence of contamination. A contaminated vial could contain positive pressure. If a contaminated vial is used for direct draw, gas or contaminated culture media could be refluxed into the patient's vein. Vial contamination may not be readily apparent. If a direct draw procedure is used, monitor the process closely to avoid refluxing materials into the patient.

Prior to use, the user should examine the vials for evidence of damage or deterioration. Vials displaying turbidity, contamination, or discoloration (darkening) should not be used. On rare occasions, a vial may not be sealed sufficiently. The contents of the vials may leak or spill, especially if the vial is inverted. If the vial has been inoculated, treat the leak or spill with caution, as pathogenic organisms/agents may be present. Before discarding, sterilize all inoculated vials by autoclaving.

Positive culture vials for subculturing or staining, etc.: before sampling it is necessary to release gas which often builds up due to microbial metabolism. Sampling should be performed in a biological safety cabinet if possible, and appropriate protective clothing, including gloves and masks, should be worn. See Procedure section for more information on subculturing.

To minimize the potential of leakage during inoculation of specimen into culture vials, use syringes with permanently attached needles or BD Luer-Lok™ tips.

Molecular tests performed on positive blood cultures will detect both viable and non-viable organisms commonly found in culture media. Therefore, Molecular test results should be evaluated in conjunction with Gram Stain results in accordance with standard-of-care practices as well as manufacturer's instructions for use.

Storage Instructions

The BD BACTEC vials are ready for use as received and require no reconstitution or dilution. Store in a cool, dry place (2–25 °C), **out of direct light**.

SPECIMEN COLLECTION

The specimen must be collected using sterile techniques to reduce the chance of contamination. Published studies have shown that the recommended specimen volume is 8–10 mL.^{9,10} It is recommended that the specimen be inoculated into the BD BACTEC vials at bedside. A 10cc or 20cc syringe with a BD Luer-Lok brand tip is used to draw the sample, or a BD Vacutainer® Brand Needle Holder and a BD Vacutainer Brand Blood Collection Set, BD Vacutainer Safety-Lok™ Blood Collection Set or other tubing "butterfly" set may be used. If using a needle and tubing set (direct draw), carefully observe the direction of blood flow when starting sample collection. The vacuum in the vial will usually exceed 10 mL, so the user should monitor the volume collected by means of the 5 mL graduation marks on the vial label. Sample volumes as low as 3 mL can be used, however, recovery will not be as great as with larger volumes. **The inoculated BD BACTEC vial should be transported to the laboratory as quickly as possible.**

PROCEDURE

Remove the flip-off cap from the BD BACTEC vial top and inspect the vial for cracks, contamination, excessive cloudiness, and bulging or indented septum. **DO NOT USE** if any defect is noted. Before inoculating, swab the septum with alcohol (iodine is not recommended). Aseptically inject or draw directly 8–10 mL of specimen per vial. If sample volumes of 3–7 mL are used, recovery will not be as great as with larger volumes (see Limitations of the Procedure). **Inoculated vials should be placed in the BD BACTEC fluorescent series instrument as soon as possible** for incubation and monitoring. If placement of an inoculated vial into the instrument has been delayed and visible growth is apparent, it should not be tested in the BD BACTEC fluorescent series instrument, but rather it should be subcultured, Gram-stained and treated as a presumptively positive bottle.

Vials entered into the instrument will be automatically tested every ten minutes for the duration of the testing protocol period. Positive vials will be determined by the BD BACTEC fluorescent series instrument and identified as such (see the appropriate BD BACTEC Fluorescent Series Instrument User's Manual). The sensor inside the bottle will not appear visibly different in positive and negative vials, however the BD BACTEC fluorescent series instrument can determine a difference in fluorescence.

If at the end of the testing period a negative vial appears visually positive (i.e., chocolatized blood, bulging septum, and/or lysed), it should be subcultured and Gram-stained and treated as a presumptively positive vial.

Positive vials should be subcultured and Gram-stained. In a great majority of cases, organisms will be seen and a preliminary report can be made to the physician. Subcultures to solid media and a preliminary direct antimicrobial susceptibility test may be prepared from fluid in the BD BACTEC vials.

Subculturing: Prior to subculturing, put the vial in an upright position, and place an alcohol wipe over the septum. To release pressure in the vial, use an appropriate venting unit (BD Cat. No. 249560 or equivalent). The needle should be removed after the pressure is released and before sampling the vial for subculture. The insertion and withdrawal of the needle should be done in a straight-line motion, avoiding any twisting motions.

QUALITY CONTROL

Quality control requirements must be performed in accordance with applicable local, state and/or federal regulations or accreditation requirements and your laboratory's standard Quality Control procedures. It is recommended that the user refer to pertinent CLSI guidance and CLIA regulations for appropriate Quality Control practices.

DO NOT USE culture vials past their expiration date.

DO NOT USE culture vials that exhibit any cracks or defects; discard the vial in the appropriate manner.

Quality Control Certificates are provided with each carton of media. Quality Control Certificates list test organisms, including ATCC® cultures specified in the CLSI Standard M22, *Quality Control for Commercially Prepared Microbiological Culture Media*. The range of time-to-detection in hours was ≤ 72 hours for each of the organisms listed on the Quality Control Certificate for this medium:

Anaerobic Medium Organisms

- | | |
|-----------------------------------|------------|
| • <i>Clostridium histolyticum</i> | ATCC 19401 |
| • <i>Clostridium perfringens</i> | ATCC 13124 |
| • <i>Streptococcus pneumoniae</i> | ATCC 6305 |
| • <i>Bacteroides fragilis*</i> | ATCC 25285 |
| • <i>Escherichia coli</i> | ATCC 25922 |
| • <i>Bacteroides vulgatus</i> | ATCC 8482 |
| • <i>Staphylococcus aureus</i> | ATCC 25923 |

*CLSI-recommended strain

For information on Quality Control for the BD BACTEC fluorescent series instrument, refer to the appropriate BD BACTEC Fluorescent Series Instrument User's Manual.

RESULTS

A positive sample is determined by the BD BACTEC fluorescent series instrument and indicates the presumptive presence of viable microorganisms in the vial.

LIMITATIONS OF THE PROCEDURE

Contamination

Care must be taken to prevent contamination of the sample during collection and inoculation into the BD BACTEC vial. A contaminated sample will give a positive reading, but will not indicate a relevant clinical sample. Such a determination must be made by the user based on such factors as type of organism recovered, occurrence of the same organism in multiple cultures, patient history, etc.

Recovery of SPS Sensitive Organisms From Blood Samples

Because blood can neutralize the toxicity of SPS toward organisms sensitive to SPS (such as *Peptostreptococcus anaerobius*), the presence of maximum volumes of blood (i.e., up to 10 mL) can help to optimize recovery of these organisms. To enhance the growth of SPS sensitive organisms when less than 8 mL of blood is inoculated, additional whole human blood may be added.

Nonviable Organisms

A Gram-stained smear from a culture medium may contain small numbers of nonviable organisms derived from media constituents, staining reagents, immersion oil, glass slides, and specimens used for inoculation. In addition, the patient specimen may contain organisms that will not grow in the culture medium or in media used for subculture. Such specimens should be subcultured to special media as appropriate.

Antimicrobial Activity

Neutralization of the antimicrobial activity by resins varies depending upon dosage level and timing of specimen collection. The use of supplementary additives should be considered in appropriate situations; as an example, the addition of penicillinase when β -lactam therapy is being employed.

Recovery of *Streptococcus pneumoniae*

In aerobic media, *S. pneumoniae* will typically be visually and instrument positive, but in some cases no organism will be seen on Gram stain or recovered on routine subculture. If an anaerobic vial was also inoculated, the organism can usually be recovered by performing an aerobic subculture of the anaerobic vial, since this organism has been reported to grow well under anaerobic conditions.¹¹

General Considerations

Optimum recovery of isolates will be achieved by adding 8–10 mL of blood.^{9–10} Use of lower or higher volumes may adversely affect recovery and/or detection times of organisms such as *Peptostreptococcus anaerobius*, *Finegoldia magna*, and *Peptoniphilus asaccharolyticus*. Blood may contain antimicrobials or other inhibitors which may slow or prevent the growth of microorganisms. False negative readings may result when certain organisms are present which do not produce enough CO₂ to be detected by the system or if significant growth has occurred before placing the vial into the system. False positivity may occur when the white blood cell count is high. The default 5 day protocol was utilized for all analytical testing with this device and protocols longer than 5 days have not been evaluated.

Due to the nature of biological materials in media products and inherent organism variability, the user should be cognizant of potential variable results in the recovery of certain microorganisms.

EXPECTED VALUES AND SPECIFIC PERFORMANCE CHARACTERISTICS

Performance of the BD BACTEC Plus Anaerobic/F medium contained in glass vials has been established by a number of external clinical studies.^{1–4,12} Seeded laboratory studies performed by BD have shown equivalent performance of the BD BACTEC Plus Anaerobic/F medium contained in plastic vials to the BD BACTEC Plus Anaerobic/F medium contained in glass vials.¹³

A total of 528 paired sets at 10 to 100 CFU per vial were evaluated for recovery using a diverse set of microorganisms frequently isolated in blood. Of the 528 paired sets, 442 sets recovered organisms in both the BD BACTEC Plus Anaerobic/F medium contained in a plastic vial and the BD BACTEC Plus Anaerobic/F medium contained in a glass vial. The BD BACTEC Plus Anaerobic/F medium contained in a plastic vial recovered organisms in fourteen instances where the BD BACTEC Plus Anaerobic/F medium contained in a glass vial did not. There were 70 paired sets that were not detected in either the BD BACTEC Plus Anaerobic/F medium contained in a glass or plastic vial. There were two instances where the BD BACTEC Plus Anaerobic/F medium contained in a plastic vial did not detect the inoculated organisms that were detected by the BD BACTEC Plus Anaerobic/F medium contained in a glass vial: one replicate of *Bacteroides fragilis* inoculated with 98 CFU and one replicate of *Fusobacterium nucleatum* inoculated with 38 CFU. *Bacteroides fragilis* grew and detected in the new device 22 of 24 times at 98 CFU per vial and *Fusobacterium nucleatum* grew and detected in the new device 21 of 22 times at 38 CFU per vial. Both the BD BACTEC Plus Anaerobic/F medium contained in a plastic vial and the BD BACTEC Plus Anaerobic/F medium contained in a glass vial did not recover 24 paired replicates of *Finegoldia magna* at 25 CFU/vial and *Peptostreptococcus anaerobius* at 61 and 39 CFU/vial (12 replicates each), with all paired replicates demonstrating no growth upon terminal subculture. Additionally, both vial types demonstrated variable performance with *Peptoniphilus asaccharolyticus*: the BD BACTEC Plus Anaerobic/F medium contained in a plastic vial recovered 7 paired replicates, with the BD BACTEC Plus Anaerobic/F medium contained in a glass vial recovering 3 paired replicates and both vials not recovering 17 paired replicates. The median time to detection difference between the paired sets was 4.62 minutes, in favor of the BD BACTEC Plus Anaerobic/F medium contained in a plastic vial.

There were two false negative results (i.e., end of protocol, instrument negative vials with a positive terminal subculture) observed with the BD BACTEC Plus Anaerobic/F medium contained in a plastic vial: *Peptoniphilus asaccharolyticus* inoculated at 46 CFU and *Porphyromonas asaccharolytica* (formerly *Bacteroides melaninogenicus* subsp. *asaccharolyticus*) inoculated at 0 CFU.

C. perfringens (MIC < 0.05 µg/mL) tested with meropenem at 0.05 µg/mL did not recover in the BD BACTEC Plus Anaerobic/F medium in both glass and plastic vials. *Bacteroides fragilis* (MIC < 0.5 µg/mL), *Enterococcus faecalis* (MIC 4 µg/mL) and *Staphylococcus aureus* (MIC 0.065 µg/mL) were able to grow and detect in the BD BACTEC Plus Anaerobic/F medium in both glass and plastic vials with meropenem concentrations greater than their respective MICs, with one replicate of *S. aureus* not recovering in the plastic vial.

The following organisms were evaluated in the analytical studies: *Bacteroides fragilis*, *B. ovatus*, *B. thetaiotaomicron*, *B. vulgatus*, *Clostridium histolyticum*, *C. novyi*, *C. perfringens*, *Enterococcus faecalis*, *E. faecium*, *Escherichia coli*, *Finegoldia magna*, *Fusobacterium nucleatum*, *Klebsiella pneumoniae*, *Peptoniphilus asaccharolyticus*, *Peptostreptococcus anaerobius*, *Porphyromonas asaccharolytica*, *Staphylococcus aureus*, *S. epidermidis*, *Streptococcus agalactiae*, *S. pneumoniae*, *S. pyogenes* and *Veillonella parvula*.

In microbial detection limit testing, a total of 312 paired sets at target inoculum levels of 0 to 1 and 1 to 10 CFU per vial were evaluated. This study was designed to assess the capability of the BD BACTEC blood culture media tested to detect one CFU, when present. Of the 312 paired sets tested, 155 grew and detected in both devices and 76 did not detect in either. Twenty-eight cultures grew and detected only in the BD BACTEC Plus Anaerobic/F medium contained in a glass vial. Fifty-three cultures grew and detected only in BD BACTEC Plus Anaerobic/F medium contained in a plastic vial.

AVAILABILITY

Cat. No. Description

442022 BD BACTEC™ Plus Anaerobic/F Medium, Case of 50 plastic vials

REFERENCES

1. Wallis, C. et al. 1980. Rapid isolation of bacteria from septicemic patients by use of an antimicrobial agent removal device. *J. Clin. Microbiol.* 11:462–464.
2. Applebaum, P.C. et al. 1983. Enhanced detection of bacteremia with a new BACTEC resin blood culture medium. *J. Clin. Microbiol.* 17:48–51.
3. Pohlman, J.K. et al. 1995. Controlled clinical comparison of Isolator and BACTEC 9240 Aerobic/F resin bottle for detection of bloodstream infections. *J. Clin. Microbiol.* 33:2525–2529.
4. Flayhart, D. et al. 2007. Comparison of BACTEC Plus blood culture media to BacT/Alert FA blood culture media for detection of bacterial pathogens in samples containing therapeutic levels of antibiotics. *J. Clin. Microbiol.* 45:816–821.
5. Clinical and Laboratory Standards Institute. 2005. proved Guideline M29-A3. Protection of laboratory workers from occupationally acquired infections, 3rd ed. CLSI, Wayne, Pa.
6. Garner, J.S. 1996. Hospital Infection Control Practices Advisory Committee, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Guideline for isolation precautions in hospitals. *Infect. Control Hospital Epidemiol.* 17: 53–80.
7. U.S. Department of Health and Human Services. 2007. Biosafety in microbiological and biomedical laboratories, HHS Publication (CDC), 5th ed. U.S. Government Printing Office, Washington, D.C.
8. Directive 2000/54/EC of the European Parliament and of the Council of 18 September 2000 on the protection of workers from risks related to exposure to biological agents at work (seventh individual directive within the meaning of Article 16(1) of Directive 89/391/EEC). Official Journal L262, 17/10/2000, p. 0021–0045.
9. Lin, H-H. et al. 2012. Evaluation of the blood volume effect on the diagnosis of bactemia in automated blood culture systems. Doi:10.1016/j.jmii.2012.03.2012.
10. Reimer, L.G. et al. 1997. Update on detection of bactemia and fungemia. *Clin. Micro. Rev.* 10:444–465.
11. Howden, R.J. 1976. Use of anaerobic culture for the improved isolation of *Streptococcus pneumoniae*. *J. Clin. Pathol.* 29:50–53.
12. Smith, J.A. et al. 1995. Comparison of BACTEC 9240 and BacT/Alert blood culture systems in an adult hospital. *J. Clin. Microbiol.* 33:1905–1908.
13. Data available from BD Life Sciences.

Technical Information: In the United States contact BD Technical Service and Support at 1.800.638.8663 or bd.com.

Change History

Revision	Date	Change Summary
(08)	2019-09	Converted printed instructions for use to electronic format and added access information to obtain the document from BD.com/e-labeling. In Warnings and Precautions section, added recommendation to perform molecular testings on positive blood cultures according to standard-of-care practices and manufacturer's instructions for use.

US Customers only: For symbol glossary, refer to bd.com/symbols-glossary



Manufacturer / Производител / Výrobce / Fabrikant / Hersteller / Κατασκευαστής / Fabricante / Tootja / Fabricant / Proizvodač / Gyártó / Fabbricante / Аткарушы / 제조업체 / Gamintojas / Ražotājs / Tilvirker / Producēt / Producător / Производитель / Výrobca / Proizvodač / Tillverkare / Uretici / Виробник / 生产厂商



Use by / Используйте до / Spotrebujte do / Brug før / Verwendbar bis / Xρήση έως / Usar antes de / Kasutada enne / Date de péremption / 사용 기한 / Upotrijebite do / Fehlhasználhatóság dátuma / Usare entro / Дейн пайдалануға / Naudokite iki / Izletot līdz / Houdbaar tot / Brukes for / Stosować do / Prazo de validade / A se utiliza pán la / Использовать до / Použíte do / Upotrebiti do / Använd före / Son kullanım tarihi / Використати до/line / 使用截止日期

YYYY-MM-DD / YYYY-MM (MM = end of month)

ГГГГ-ММ-ДД / ГГГГ-ММ (ММ = край на месеца)

RRRR-MM-DD / RRRR-MM (MM = konec měsíce)

AAAA-MM-DD / AAAA-MM (MM = slutning af måned)

JJJJ-MM-TT / JJJJ-MM (MM = Monatsende)

EEEE-MM-HH / EEEE-MM (MM = τέλος του μήνα)

AAAA-MM-DD / AAAA-MM (MM = fin del mes)

AAAA-KK-PP / AAAA-KK (KK = kuu lõpp)

AAAA-MM-JJ / AAAA-MM (MM = fin du mois)

GGGG-MM-DD / GGGG-MM (MM = kraj mjeseca)

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AAAAMM-GG / AAAA-MM (MM = fine mese)

ЖЮЮЮК-AA-KK / ЖЮЮЮК-AA / (AA = айдан соңы)

YYYY-MM-DD/YYYY-MM(MM = 월 말)

MMMM-MM-DD / MMMM-MM (MM = mēnesis pabaiga)

GGGG-MM-DD/GGGG-MM (MM = meneša beigas)

JJJJ-MM-DD / JJJJ-MM (MM = einde maand)

AAAA-MM-DD / AAAA-MM (MM = slutten av måneden)

RRRR-MM-DD / RRRR-MM (MM = koniec miesiąca)

AAAA-MM-DD / AAAA-MM (MM = fin do mês)

AAAA-LZ-ZZ / AAAA-LL (LL = sfârșitul lunii)

ГГГГ-ММ-ДД / ГГГГ-ММ (ММ = конец месяца)

RRRR-MM-DD / RRRR-MM (MM = koniec mesiaca)

GGGG-MM-DD / GGGG-MM (MM = kraj meseca)

AAAA-MM-DD / AAAA-MM (MM = slutet av månaden)

YYYY-AA-GG / YYYY-AA (AA = ayin sonu)

PPPP-MM-DD / PPPP-MM (MM = кінець місяця)

YYYY-MM-DD / YYYY-MM (MM = 月末)



Catalog number / Каталожен номер / Katalogové číslo / Katalognummer / Αριθμός καταλόγου / Número de catálogo / Katalooginumber / Numéro catalogue / Kataloški broj / Katalógu szám / Numero di catalogo / Каталог номір / 카탈로그 번호 / Katalogo / numeris / Kataloga numurs / Catalogus nummer / Numer katalogowy / Număr de catalog / Номер по каталогу / Katalógové číslo / Kataloški broj / Katalog numarası / Номер за каталогом / 目录号



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In Vitro Diagnostic Medical Device / Медицински уред за диагностика ин vitro / Lékařské zařízení určené pro diagnostiku in vitro / In vitro diagnostisk medicinsk anordning / Medizinisches In-vitro-Diagnostikum / In vitro διαγνωστική ιατρική συσκευή / Dispositivo médico para diagnóstico in vitro / In vitro diagnostika meditsinskaaparatur / Dispositif médical de diagnostic in vitro / Medicinska pomagala za In Vitro Dijagnostiku / In vitro diagnostikai orvosi eszköz / Dispositivo mediceale per diagnostica in vitro / Ιασανδριανής μεдициналық диагностика аспабы / In Vitro Diagnostic 의료 기기 / In vitro diagnostikos prietais / Medicīnas ierīces, ko lieto in vitro diagnostikā / Medisch hulpmiddel voor in-vitro diagnostiek / In vitro diagnostisk medisinsk utstyr / Urządzenie medyczne do diagnostyki in vitro / Dispositivo médico para diagnóstico in vitro / Dispositivo medical pentru diagnostic in vitro / Медицинский прибор для диагностики in vitro / Medicínska pomôcka na diagnostiku in vitro / Medicinski uredaj za in vitro diagnostiku / Medicinteknisk produkt för in vitro-diagnostik / In Vitro Diagnostik Tibbi Cihaz / Медичний пристрій для діагностики in vitro / 体外诊断医疗设备



Temperature limitation / Температурни ограничения / Teplotní omezení / Temperaturbegrensning / Temperaturbegrenzung / Περιορισμοί θερμοκρασίας / Limitación de temperatura / Temperatuuri piirang / Limites de température / Dozvoljena temperatura / Hőmérsékleti határ / Limiti di temperatura / Температурны шектеу / 온도 제한 / Laikymo temperatūra / Temperatūras ierobežojumi / Temperaturlimit / Temperaturbegrenzung / Ограничение температуры / Limites de temperatura / Limite de temperatură / Ограничение температуры / Ohranenie teploty / Ograniczenie temperature / Temperaturgräns / Sıcaklık sınırlaması / Обмеження температури / 温度限制



Batch Code (Lot) / Код на партидата / Kód (číslo) šárže / Batch-kode (lot) / Batch-Code (Charge) / Κωδικός παρτίδας (παρτίδα) / Código de lote (lote) / Partii kood / Numéro de lot / Lot (kod) / Tétel száma (Lot) / Codice batch (lotto) / Топтама коды / 배치 코드(로트) / Partijos numeris (LOT) / Partijas kods (laidiens) / Lot nummer / Batch-kode (parti) / Kod parti (seria) / Código do lote / Cod de serie (Lot) / Код партии (лот) / Kód série (šárža) / Kod serije / Partinummer (Lot) / Parti Kodu (Lot) / Kod partii / 批号 (亚批)



Contains sufficient for <n> tests / Съдържанието е достатъчно за <n> теста / Dostatečné množství pro <n> testů / Indeholder tilstrækkeligt til <n> tests / Ausreichend für <n> Tests / Περιέχει επαρκή ποσότητα για <n> εξτάσεις / Contenido suficiente para <n> pruebas / Kullaldane <n> testide jaoks / Contenu suffisant pour <n> tests / Sadržaj za <n> testova / <n> tesztelésre elégő / Contenuto sufficiente per <n> test / <n> testterei χώριν жеткелти / <n> 테스트가 충분히 포함됨 / Pakankamas kieks atlikti <n> testu / Satur pietiekami <n> párbaudēm / Inhou voldoende voor <n> testen / Innholder tilstrekkelig til <n> tester / Zawiera ilości wystarczającą do <n> testów / Conteúdo suficiente para <n> testes / Continut suficient pentru <n> teste / Достаточно для <n> тестов(a) / Obsah vystačí na <n> testov / Sadržaj dovoljan za <n> testova / Innehåller tillräckligt för <n> analyser / <n> test için yeterli malzemeler / Вистачить для аналізів: <n> / 足够进行 <n> 次检测



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Serial number / Серийн номер / Sériové číslo / Serienummer / Seriennummer / Σειριακός αριθμός / Nº de serie / Seerianumber / Numéro de série / Serijski broj / Sorozatszám / Numero di serie / Топтамалық номір / 일련 번호 / Serijos numeris / Sērijas numurs / Serie nummer / Numer seryjny / Número de serie / Număr de serie / Серийный номер / Seri numarası / Номер cepii / 序列号



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Lower limit of temperature / Долен лимит на температурата / Dolni hranice teploty / Nedre temperaturgrænse / Temperaturuntergrenze / Като́tero ório θερμοκράσίας / Límite inferior de temperatura / Alumine temperaturuppir / Limite inférieure de température / Najniža dovoljenja temperatura / Alsó hőmérsékleti határ / Limite inferiore di temperatura / Температурның төмөнгі руқсат шеги / 하한 온도 / Žemiasiaus laikymo temperatūra / Temperatūras zemākā robeža / Laagste temperatuurlimiet / Nedre temperaturgrense / Dolna granica temperatury / Limite minimo de temperatura / Limită minimă de temperatură / Нижний предел температуры / Spodná hranica teploty / Donja granica temperature / Nedre temperaturgräns / Sicaklık alt sınırı / Мінімальна температура / 温度下限

CONTROL

Control / Контролно / Kontrola / Kontroll / Kontrolle / Kontrole / Controllo / Bağılıyap / Контроль / Kontrollé / Kontrole / Controle / Controlo / Kontrolъ / Kontroll / Kontrolъ / 对照

CONTROL+

Positive control / Положителен контрол / Pozitív kontrola / Positiv kontrol / Positive Kontrolle / Θετικός μάρτυρας / Control positivo / Positivne kontroll / Contrôle positif / Pozitívna kontrola / Pozitív kontroll / Controllo positivo / ΟΗη бакылыу / 양성 컨트롤 / Teigama kontrolé / Pozitív kontrole / Positieve controle / Kontrola dodatnia / Controlo positivo / Control pozitív / Положительный контроль / Pozitif kontrol / Позитивный контроль / 附性对照试剂

CONTROL-

Negative control / Оригинален контрол / Negativ kontrola / Negativ kontrol / Negative Kontrolle / Αρνητικός μάρτυρας / Control negativo / Negatiivne kontroll / Contrôle négatif / Negativna kontrola / Negativ kontroll / Controllo negativo / Негативтик бакылыу / 음성 컨트롤 / Neigama kontrolé / Negativă kontrole / Negatiivne kontrole / Kontrola ujemna / Controlo negativo / Control negativ / Оригинальный контроль / Negatif kontrol / Негативный контроль / 阴性对照试剂

STERILEEO

Method of sterilization: ethylene oxide / Метод на стерилизация: этиленов оксид / Způsob sterilizace: etylenoxid / Sterilisierungsmetode: ethylenoxid / Méthode de stérilisation: oxyde d'éthylène / Metoda sterilizacije: etilen oksid / Sterilizálás módszere: etilén-oxid / Metodo di sterilizzazione: ossido di etilene / Стерилизация адіси – этилен топты / 소독 방법: 에틸렌옥사이드 / Sterilizavimo būdas: etileno oksidas / Sterilizēšanas metode: etilēnoksīds / Gesterileerd met behulp van ethyleenoxide / Sterilisierungsmetode: etylenoksid / Metoda sterilityzacji: tlenek etylu / Método de esterilización: óxido de etileno / Metodă de sterilizare: oxid de etilenă / Метод стерилизации: этиленоксид / Metód sterilizacie: etylénoxid / Metoda sterilizacije: etilen oksid / Sterilisierungsmetod: etenoxid / Sterilizasyon yöntemi: etilen oksit / Метод стерилизации: этиленоксидом / 灭菌方法: 环氧乙烷

STERILE R

Method of sterilization / Истриализация / Метод на стерилизация: иридиация / Způsob sterilizace: záření / Sterilisierungsmetode: bestralung / Sterilisationsmethode: bestrahling / Sterilisation / Мéthodooς αποτέλεσμας: αινιέλενοξίδιο / Método de esterilización: irradiación / Steriliseerimismeetod: kiiritus / Méthode de stérilisation : irradiation / Metoda sterilizacije: zračenje / Sterilizálás módszere: besugárzás / Metodo di sterilizzazione: irradiazione / Sterilizacija адиси – сауне түсірү / 소독 방 법: 방사 / Sterilizavimo būdas: radiacija / Sterilizēšanas metode: apstarošana / Gesterileerd met behulp van bestraling / Sterilisierungsmetode: bestrálung / Metoda sterilityzacji: bestrálung / Metodă de sterilizare: napromienianie / Método de esterilização: irradiação / Metodă de sterilizare: iradiare / Метод стерилизации: облучение / Metód sterilizacie: ozárenie / Metoda sterilizacije: ozračavanje / Sterilisierungsmetod: strálning / Sterilizasyon yöntemi: irradasyon / Метод стерилизаций: опроміненням / 灭菌方法: 辐射



Biological Risks / Биологични рискове / Biologická rizika / Biologisk fare / Biogegefährdung / Biolojikoú kívülvöi / Riesgos biológicos / Bioloogilised riskid / Risques biologiques / Biološki rizik / Biológiaiag veszélyes / Rischio biologico / Biologiyalıq teyukeşler / 생물학적 위험 / Biologinis pavojus / Biologiske risiki / Biologisch risico / Biologisk risiko / Zagrożenia biologiczne / Perigo biológico / Riscuri biologice / Биологическая опасность / Biologické riziko / Biološki rizici / Biologisk risk / Biyolojik Riskler / Биологична небезпека / 生物学风险



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Upper limit of temperature / Горен лимит на температурата / Horní hranice teploty / Øvre temperaturgrænse / Temperaturobergrenze / Ану́теро ório θερμοκράσίας / Límite superior de temperatura / Ülémirem temperaturuppir / Limite supérieure de température / Gornja dovoljenja temperatura / Felső hőmérsékleti határ / Limite superiore di temperatura / Температурның төмөнгі руқсат шеги / 상한 온도 / Aukščiausia laikymo temperatūra / Augščiā temperatūras robeža / Hoogste temperatuurlimiet / Øvre temperaturgrense / Górnia granica temperatury / Limite máximo de temperatura / Limită maximă de temperatură / Верхний предел температуры / Horná hranica teploty / Gornja granica temperature / Øvre temperaturgräns / Sicaklık üst sınırı / Максимальна температура / 温度上限



Keep dry / Пазете сухо / Skladujte v suchém prostředí / Opbevares tørt / Trocklagern / Філдэ́тъте то оте́гў / Mantener seco / Hoida kuivas / Conserver au sec / Držati na suhom / Száraz helyen tartandó / Tenere all'asciutto / Күргәк күйинде уста / 건조 상태 유지 / Laikykite sausai / Uzglabāt sausus / Droog houden / Holdes tørt / Przechowywać w stanie suchym / Manter seco / A se feri de umezelā / Не допускать попадания влаги / Uchovávajte v suchu / Držite na suvom mestu / Förvaras torrt / Kuru bir şekilde muhafaza edin / Берегти від вологи / 请保持干燥



Collection time / Время на събиране / Čas odběru / Opsamlingstidspunkt / Entnahmehrzeit / Ήρα συλλογής / Hora de recogida / Kogumisaeg / Heure de prélevement / Satí prikupljanja / Mintavétel időpontja / Ora di raccolta / Жинай ақыры / 수집 시간 / Paémimo laikas / Savākšanas laiks / Verzameltijd / Tid prøvetaking / Godzina pobrania / Hora de colheita / Ora de colectări / Время сбора / Doba odberu / Vreme prikupljanja / Uppsamlingstid / Toplama zamanı / Час забора / 采集时间



Peel / Обреже / Otevřete zde / Ábn / Abziehen / Аткодаллұт / Desprender / Koord / Décoller / Otvoriti skin / Húzza le / Staccare / Үстіңгі қабатын алып таста / 剥起 / Pliešť čia / Atlímét / Schillen / Trekk av / Oderwać / Destacar / Se dezlipeste / Открепить / Odtrhnite / Oluştı / Dra isăr / Ayırma / Відкнеť / 撕下



Perforation / Перфорация / Perforace / Perforering / Диатроп / Perforación / Perforaciōn / Perforacija / Perforálás / Perforazione / Tecik tecy / 절취선 / Perforacija / Perforācija / Perforatie / Perforacija / Perfuração / Perforare / Перфорация / Perforácia / Perforasyon / Перфорация / 穿孔



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Keep away from heat / Пазете от топлина / Nevystavujte přílišnému teplu / Må ikke utsættes for varme / Vor Wärme schützen / Крайтте то атпік аттап / Θερμότητα / Mantener alejada de fuentes de calor / Hoida eimal valgusest / Protéger de la chaleur / Držati dalje od izvora topline / Óvja a melegtől / Tenerе lontano dal calore / Салыңын жерде сакта / 열을 피해야 할 / Laikykite atokiau nuo šilumos šaltiniu / Sargát no karstuma / Beschermen tegen warmte / Må ikke utsettes for varme / Przechowywać z dala od źródeł ciepła / Manter ao abrigo do calor / A se feri de căldură / Не нагревать / Uchovávajte mimo zdroja tepla / Držite dalje od toplote / Får ej utsättas för värme / Isidan uzak tutun / Берегти від дії тепла / 请远离热源



Cut / Срежете / Odstrňte / Klip / Schneiden / Кóрж / Cortar / Lõigata / Découper / Reži / Vágja ki / Tagliare / Kecisiz / 잘라내기 / Kirpti / Nogriezt / Knippen / Kutt / Odciąć / Cortar / Decupati / Отрезать / Odstrňnite / Iseči / Klipp / Kesme / Rozřízati / 剪下



Collection date / Дата на събиране / Datum odběru / Opsamlingsdato / Entnahmedatum / Ημερομηνία συλλογής / Fecha de recogida / Kogumiskuupäev / Date de prélèvement / Dani prikupljanja / Mintavétele dátuma / Data di raccolta / Жынаган тізбекүні / 수집 날짜 / Paémimo data / Savākšanas datums / Verzameldatum / Dato prøvetaking / Data pobrania / Data de colheita / Data colectării / Дата сбора / Dátum odberu / Datum prikupljanja / Uppsamlingsdatum / Toplama tarihi / Дата забору / 采集日期



µL/test / µL/тест / µL/Test / µL/εξέταση / µL/prueba / µL/teszt / µL/테스트 / мкл/тест / µL/tirimas / µL/pärbaude / µL/teste / мкл/анализ / µL/检测



Keep away from light / Пазете от светлина / Nevystavujte světlu / Må ikke udsættes for lys / Vor Licht schützen / Кратјоте то јакрија атпо то фиџ / Mantener alejado de la luz / Hoida eemal valgusest / Conserver à l'abri de la lumière / Držati dalje od svjetla / Fény nem érheti / Tenere al riparo dalla luce / Қаралыланған жерде ұста / 빛을 피해야 함 / Laikyti atokiu nuo šilumos šaltinių / Sargāt no gaismas / Niet blootstellen aan zonlicht / Må ikke utsettes for lys / Przechowywać z dala od źródła światła / Manter ao abrigo da luz / Feriți de lumină / Хранить в темноте / Uchovávajte mimo dosahu svetla / Držite dalje od svjetlosti / Får ej utsättas för ljus / Ішкітан узак тұтун / Берегти від дін світла / 请远离光线



Hydrogen gas generated / Образуван е водород газ / Možnost úniku plynného vodíku / Frembringer hydrogengas / Wasserstoffgas erzeugt / Δημιουργία αερίου υδρογόνου / Producción de gas de hidrógeno / Vesinikgaasi tekkitähd / Produkt de l'hydrogène gazeux / Sadrži hydrogen vodik / Hydrogén gáz fejeszt / Produzione di gas idrogeno / Газетек сутери пайды болды / 수소 가스 생성됨 / İşskiria vandenilio dujas / Rodas Üdeğridis / Waterstofgas gegenereerd / Hydrogengass generert / Powoduje powstawanie wodoru / Produção do gás de hidrogénio / Generare gaz de hidrogen / Выделение водорода / Vyrobené použitím vodíku / Oslobada se vodoník / Genererad välgas / Açıga çıkan hidrojen gazi / Реакция з видленням водню / 会产生氢气



Patient ID number / ИД номер на пациента / ID pacienta / Patientens-ID / Арифмос αναγνώρισης ασθενούς / Número de ID del paciente / Patsiendi ID / No d'identification du patient / Identifikacijski broj pacijenta / Beteg azonosító száma / Numero ID paziente / Пациенттің идентификациялық немірі / 환자 ID 번호 / Paciento identifikavimo numeris / Pacienta ID numurs / Identificatienummer van de patiënt / Pasientens ID-nummer / Numer ID pacienta / Número da ID do doente / Număr ID pacient / Идентификационный номер пациента / Identifikačné číslo pacienta / ID broj pacijenta / Patientnummer / Hasta kimlik numarası / Идентификатор пациента / 患者标识号



Fragile, Handle with Care / Чупливо, Работете с необходимото внимание. / Krehké. Při manipulaci postupujte opatrně. / Forsiktig, kan gå i stykker. / Zerbrechlich, vorsichtig handhaben. / Εύθραυστο. Χειρίστε το με προσοχή. / Frágil. Manipular con cuidado. / Óm, kásitsege ettévaatlikult. / Fragile. Manipuler avec précaution. / Lomljivo, rukujte pažljivo. / Törékeny! Övatosan kezelendő. / Fragile, maneggiare con cura. / Сынъш, абайлан пайдаланызыз. / 조심 깨지기 쉬운 처리 / Trapu, elkités atsargiai. / Trauslis; rikkoties uzmanīgi / Brekebaar, voorzichtig behandelen. / Ømtålig, håndter forsiktig. / Krucha zawartość, przenosić ostrożnie. / Frágil, Manusear com Cuidado. / Fragil, manipulați cu atenție. / Хрупко! Обращаться с осторожностью. / Krehké, vyžaduje sa opatrná manipulácia. / Lomljivo - rukujte pažljivo. / Bräckligt. Hantera försiktigt. / Kolay Kirılır, Dikkatli Taşıyın. / Тендиңта, зерттасыз з обережностю / 易碎, 小心轻放

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