

Bloodstream Infections Multiplex Real-Time PCR Detection Kit

Fluorescent Probe-Based Real-Time PCR Assay

Bloodstream infections (BSIs) are among the most life-threatening clinical conditions. Pathogens entering the bloodstream can rapidly disseminate throughout the body, triggering severe systemic inflammation. Without prompt diagnosis and targeted intervention, BSIs can rapidly progress to sepsis, septic shock, or multiple-organ failure. Therefore, rapid and accurate identification of causative pathogens and associated antimicrobial-resistance genes is crucial for the timely initiation of appropriate therapy, guiding antibiotic selection, and improving patient outcomes.

This kit provides a comprehensive molecular solution for detecting 32 common bloodstream pathogens and three key resistance genes (*mecA*, *vanA/vanB*, and *KPC*). With high sensitivity and specificity, this multiplex PCR assay delivers rapid, reliable results, enabling clinicians to select targeted antimicrobial therapy and improve patient outcomes.

Test Principle

This kit uses TaqMan probe-based real-time polymerase chain reaction (PCR) technology to detect 32 pathogens and three antimicrobial-resistance genes associated with bloodstream infections in whole-blood specimens.



Product Features

Broad Pathogen Coverage

Simultaneously detects 32 common bloodstream pathogens and 3 key resistance genes in a single assay.

Captures the Critical Treatment Window

Supports the rapid initiation of targeted antimicrobial therapy.

Addresses Blood Culture Limitations

Overcomes long turnaround times and the difficulty of detecting fastidious pathogens.

Target Pathogens

	FAM	HEX/VIC	ROX	Cy5
Well 1	<i>Streptococcus pyogenes</i>	<i>Staphylococcus aureus</i>	<i>Streptococcus pneumoniae</i>	<i>Streptococcus agalactiae</i>
Well 2	<i>Listeria monocytogenes</i>	<i>Escherichia coli</i>	<i>Enterococcus faecalis</i>	<i>Pseudomonas aeruginosa</i>
Well 3	<i>Klebsiella oxytoca</i>	<i>Haemophilus influenzae</i>	<i>Neisseria meningitidis</i>	<i>Serratia marcescens</i>
Well 4	—	<i>Enterococcus faecium</i>	<i>Staphylococcus saprophyticus</i>	—
Well 5	<i>Proteus vulgaris</i>	Human betaherpesvirus 5	<i>Proteus penneri</i>	<i>Proteus mirabilis</i>
Well 6	<i>Candida glabrata</i>	<i>Candida tropicalis</i>	<i>Candida albicans</i>	<i>Candida krusei</i>
Well 7	Human gammaherpesvirus 4	Human alphaherpesvirus 1	Human alphaherpesvirus 3	Human alphaherpesvirus 2
Well 8	<i>Staphylococcus capitis</i>	<i>Klebsiella pneumoniae</i>	—	β-actin
Well 9	<i>Staphylococcus haemolyticus</i>	<i>Candida parapsilosis</i>	<i>Acinetobacter baumannii</i>	<i>Staphylococcus epidermidis</i>
Well 10	<i>mecA</i>	KPC	<i>vanA/vanB</i>	—

Application Scenarios

01 Surgery Department

For monitoring postoperative infections, especially in patients undergoing cardiac surgery or transplantation.

02 General Pediatrics

For patients with fever or shock who require rapid identification of pathogens and resistance genes.

03 Infectious Disease Department

Routine BSI testing and management of complex drug-resistant infections; Complements blood culture.

04 ICU (Intensive Care Unit)

High-risk patients with frequent sepsis/bacteremia.

05 Hematology Department

Neutropenic patients at high infection risk needing early pathogen detection.

06 Obstetrics Department

Early screening for neonatal sepsis and infections in maternal-neonatal care.

Ordering Information



Cat. No.	Product Name	Format	Sample Types	Shelf Life	Storage	Kit Size
B80203T2012	Bloodstream Infections Multiplex Real-Time PCR Detection Kit	Lyophilized	5 mL whole blood	12 months	2–8 °C	12 tests/kit

