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ePlex BCID-GN Control M326

INTENDED USE:

The ePlex BCID-GN Control M326 is intended for use as an external positive and negative quality control to monitor the performance of *in vitro* laboratory nucleic acid testing procedures for the qualitative detection of gram-negative pathogens: Acinetobacter baumannii, Bacteroides fragilis, Citrobacter, Cronobacter sakazakii, Enterobacter (non-cloacae complex), Enterobacter cloacae complex, Escherichia coli, Fusobacterium necrophorum, Fusobacterium nucleatum, Haemophilus influenzae, Klebsiella oxytoca, Klebsiella pneumoniae, Morganella morganii, Neisseria meningitidis, Proteus, Proteus mirabilis, Pseudomonas aeruginosa, Salmonella, Serratia, Serratia marcescens, Stenotrophomonas maltophilia; Pan targets: Pan Candida, Pan Gram-Positive; and resistance genes: CTX-M, IMP, KPC, NDM, OXA and VIM on the ePlex System (GenMark Diagnostics, Inc.). The ePlex BCID-GN Control M326 is composed of synthetic DNA specifically designed for and intended to be used solely with the ePlex BCID-GN Panel

PRODUCT SUMMARY and PRINCIPLE:

ePlex BCID-GN Control M326 is composed of 4 controls, ePlex BCID-GN Positive A, ePlex BCID-GN Positive B, ePlex BCID-GN Positive C and ePlex BCID-GN Negative. The ePlex BCID-GN Control M326 positive controls contain surrogate control material composed of synthetic DNA corresponding to genome segments of pathogens and resistance genes listed in Table 1. ePlex BCID-GN Negative contains no DNA.

Routine use of quality controls that are consistent lot to lot assists the laboratory in identifying shifts, trends, and increased frequency of random errors caused by variations in the test system, such as failing reagents. Early investigation can prevent failed assay runs.

COMPOSITION:

ePlex BCID-GN Control M326 is comprised of 12 tubes, 3 tubes of each positive control, A, B and C, and 3 tubes of negative control, $50\mu L$ each. The ePlex BCID-GN Positive controls contain synthetic DNA suspended in a non-infectious solution of buffers, preservatives and stabilizers. Table 1 lists the pathogens and resistance genes that are monitored by the ePlex BCID-GN Control M326 when tested by the ePlex BCID-GN Panel on the ePlex System.

STORAGE and STABILITY:

ePlex BCID-GN Control M326 should be stored refrigerated at 2-8°C. Unopened ePlex BCID-GN Control M326 material is stable through the expiration date printed on the kit label when consistently stored refrigerated. ePlex BCID-GN Control M326 components are for single use. Discard after use according to your local and federal regulations.

PRECAUTIONS and WARNINGS:

- Use the control as provided. Do not dilute or transfer to another tube.
- This product is intended for in vitro analytical testing and is provided for Research Use Only, not for use in diagnostic procedures.
- ePlex BCID-GN Control M326 is only for use with ePlex BCID-GN Panel on the ePlex System. It does not contain the entire genome of the pathogens listed in Table 1.
- This product is not intended for use as a substitute for the internal controls
 provided in ePlex BCID-GN Panel.
- This product does not contain any biological material of human or animal origin.
 Universal Precautions are NOT required when handling this product.
- Quality control materials should be used in accordance with local, state, federal regulations and accreditation requirements.
- ePlex BCID-GN Control M326 cannot be cloned, sold, or transferred without the explicit written consent of MMQCI.

INSTRUCTIONS FOR USE:

- 1. Allow the control to be tested to come completely to room temperature $(18^{\circ}-25^{\circ}C).$
- Immediately before use thoroughly mix the control by flicking the tube several times, followed by vortexing for 5-10 seconds. Shake the tube down or tap it on bench to remove any droplets remaining in the cap.
- 3. Use a calibrated pipette to aspirate $50\mu L$ of control and transfer into the cartridge sample port chamber.
- Continue to process and analyze the control with the ePlex BCID-GN Panel test on the ePlex System as you would a patient sample.
 - **Note:** Sample can be pre-defined as External Control to generate a BCID-GN External Control Report. Refer to ePlex Operator Manual for more information on defining external controls on ePlex System.
- 5. Discard controls after use according to your local and federal regulations.

For complete ePlex BCID-GN Panel instructions, refer to the ePlex BCID-GN Panel package insert provided by GenMark Diagnostics, Inc.

EXPECTED VALUES:

Table 1. lists the expected results when the controls are tested with ePlex BCID-GN Panel on the ePlex System.

The laboratory should follow Good Laboratory Practice (GLP) and establish its own performance characteristics for ePlex BCID-GN Control M326 in demonstrating adequate system performance.

Table 1. Expected Results: ePlex BCID-GN Control M326

	ePlex	ePlex	ePlex	ePlex
Control Name	BCID-GN	BCID-GN	BCID-GN	BCID-GN
	Positive A	Positive B	Positive C	Negative
Part Number	M32737	M32837	M32937	M50337
Gram-Negative Pathogen	Result			
Acinetobacter baumannii	Detected	Not Detected	Not Detected	Not Detected
Bacteroides fragilis	Detected	Not Detected	Not Detected	Not Detected
Citrobacter	Not Detected	Not Detected	Detected	Not Detected
Cronobacter sakazakii	Detected	Not Detected	Not Detected	Not Detected
Enterobacter (non-	Detected	Not Detected	Not Detected	Not Detected
cloacae complex)	Detected	Not Detected	Not Detected	Not Detected
Enterobacter cloacae complex	Detected	Not Detected	Not Detected	Not Detected
Escherichia coli	Not Detected	Detected	Not Detected	Not Detected
Fusobacterium necrophorum	Not Detected	Detected	Not Detected	Not Detected
Fusobacterium nucleatum	Detected	Not Detected	Not Detected	Not Detected
Haemophilus influenzae	Not Detected	Not Detected	Detected	Not Detected
Klebsiella oxytoca	Not Detected	Not Detected	Detected	Not Detected
Klebsiella pneumoniae group	Detected	Not Detected	Not Detected	Not Detected
Morganella morganii	Not Detected	Not Detected	Detected	Not Detected
Neisseria meningitidis	Detected	Not Detected	Not Detected	Not Detected
Proteus	Not Detected	Detected	Detected	Not Detected
Proteus mirabilis	Not Detected	Not Detected	Detected	Not Detected
Pseudomonas aeruginosa	Not Detected	Detected	Not Detected	Not Detected
Salmonella	Detected	Not Detected	Not Detected	Not Detected
Serratia	Detected	Not Detected	Not Detected	Not Detected
Serratia marcescens	Detected	Not Detected	Not Detected	Not Detected
Stenotrophomonas maltophilia	Not Detected	Not Detected	Detected	Not Detected
Pan Targets		Resu	lt	•
Pan Candida	Not Detected	Detected	Not Detected	Not Detected
Pan Gram-Positive	Not Detected	Detected	Not Detected	Not Detected
Resistance Gene		Resu	ilt	
CTX-M	N/A	Detected	N/A	N/A
IMP	N/A	N/A	Detected	N/A
KPC	N/A	N/A	Detected	N/A
NDM	N/A	N/A	Detected	N/A
OXA	Detected	N/A	N/A	N/A
VIM	Detected	N/A	N/A	N/A

Notice: ePlex is a registered trademark of GenMark Diagnostics, Inc.

ORDERING INFORMATION:

ePlex BCID-GN Control M326

Part Number: M326

Kit Contains 12 tubes x 50μL

3 each Positive A, Positive B, Positive C & Negative