



<b>Collected</b>	01/01/2014	<b>Patient</b>	TEST, PATIENT	
<b>Received</b>	01/01/2014	<b>DOB</b>	01/01/2014 [AGE Y]	<b>Sex</b> SEX
<b>MDX ID</b>	MDX12345	<b>UWMC MRN</b>	SAMPLE-1	
<b>Client Acc.</b>		<b>UWMC Acc.</b>	M12345	
<b>Reported</b>	01/01/2014	<b>Ordered by</b>		

## Bacterial detection by 16S NGS

### 16S Gene Next Gen Seq Specimen

Cerebrospinal Fluid

### 16S Gene Next Gen Seq Results

[Bacterial DNA Detected in Major Abundance]: *Fusobacterium nucleatum*

[Bacterial DNA Detected in Moderate Abundance]: *Streptococcus intermedius*

[Bacterial DNA Detected in Minor Abundance]: *Parvimonas micra*

### 16S Gene Next Gen Seq Interp

Results from this test should be correlated with clinical findings.

### 16S Gene Nxt Gen Seq Requests

Gram stain of primary sample showed rare Gram-negative rods. CSF and blood cultures performed at submitting lab were negative. Recent antimicrobial therapy: Vancomycin, Ceftriaxone, Flagyl.

### 16S Gene Next Gen Seq Method

Sensitivity of detecting microbial DNA from a tissue or fluid specimen will vary depending on the organism load, pretreatments such as formaldehyde fixation or staining, or any process that introduces exogenous microorganisms or microbial DNA. Diagnostic yield and estimated relative abundance of organisms detected may be influenced by: 16S copy number, DNA extraction efficiency, relative PCR efficiency, and the amount of microbial DNA present in the sample received. Fresh tissue is the optimal specimen to reduce introduction of exogenous DNA templates or microorganisms. Exogenous DNA or organisms may be introduced during paraffin embedding/fixation. Assay sensitivity may be reduced dramatically by formalin, which decreases DNA template yield and quality. Analytical sensitivities (genomes): 16S = 100. Analytical sensitivities or minimal detection limits are expressed in copies of bacterial genomes in a single amplification reaction performed on purified DNA.



*Tests Reviewed and Interpreted by Laboratory Directors: Brad Cookson MD PhD, Karen Stephens PhD, 206.598.5735.*