

PATIENT INFORMATION

Name : John Doe
DOB : 27/05/2003
Gender : Male

PROVIDER INFORMATION

Name : James Smith, MD, DO
NPI Number : 548798522

SAMPLE INFORMATION

Order # : 1245578925
Specimen : Stool
Collected Date : 03/30/2026
Sample Received Date : 04/02/2026
Result Reported Date : 04/06/2026

SUMMARY

PATHOGENS DETECTED BY MULTIPLEX PCR

No abnormalities detected.

PARASITES DETECTED BY MICROSCOPY

No abnormalities detected.

ABNORMALITIES IN STOOL EXAMINATION

No significant Microscopic and Macroscopic abnormalities detected.

ABNORMALITIES INTESTINAL HEALTH MARKERS (EIA)

TEST NAME	RESULT
No abnormalities detected.	

PATHOGENS DETECTED BY CULTURE

BACTERIA	RESULT
Escherichia coli.	+3



FUNGAL

FUNGAL	RESULT
Rhodotorula spp.	+3



Shows microbial growth by the quadrant streak method

◆ MACROSCOPIC

MACROSCOPIC APPEARANCE	RESULT	FLAG	REFERENCE INTERVAL
Color	Brown	—	Brown
Consistency	Hard	⊙	Soft
pH	7	—	5.8-7.0
Occult blood	Negative	—	Negative
Mucus	Negative	—	Negative

◆ MICROSCOPIC

MICROSCOPIC APPEARANCE	RESULT	FLAG	REFERENCE INTERVAL
WBC	Negative	—	Negative
RBC	Negative	—	Negative
Charcot-Leyden Crystals	Negative	—	Negative
Fat Stain	Negative	—	Negative
KOH for Yeast	None	⊙	RARE: 1-2 Per slide FEW: 2-5 Per slide MODERATE: 5-10 Per HPF MANY: >10 Per HPF High Power Field (HPF)
Carbohydrates	Positive	⊙	Negative

COLOR : Brown is the typical color of regular stool, while deviations in color may suggest abnormal gastrointestinal conditions.

CONSISTENCY : A formed stool is considered normal. variations to this may indicate abnormal gastrointestinal tract conditions.

MUCOUS : Mucous production may indicate the presence of an infection, inflammation, or malignancy.

BLOOD : The presence of blood in the stool may indicate a possible gastrointestinal tract ulcer and must always be investigated immediately

FECAL FAT : Fecal fat or steatorrhea is indicative of malabsorption in the digestive system. Conditions such as pancreatic insufficiency, celiac disease, crohn's disease, and other disorders.

CARBOHYDRATE: The presence is an indicative of carbohydrate malabsorption in the digestive system.

TEST NAME	RESULT	FLAG	REFERENCE INTERVAL
◆ GUT INFLAMMATION MARKERS			
Fecal Calprotectin*	59	—	<173 ug/mL
Eosinophil Activation Protein (EDN)	0.3	—	<2.34 ug/g
◆ GUT INTESTINAL INSUFFICIENCY			
Fecal Pancreatic Elastase*	1658	—	>200 ng/mL
◆ GUT IMMUNE RESPONSE			
Fecal Secretory IgA*	1030	—	510-2040 ug/mL
◆ INTESTINAL PERMEABILITY			
Fecal Zonulin*	5	—	0.25 - 64.00 ng/mL
◆ OTHER GUT HEALTH MARKERS			
Fecal Anti-Gliadin IgA*	8	—	<120 U/L
◆ STOOL ANTIGEN			
H. pylori Fecal Ag. EIA*	Negative	—	Negative

↑ Represents elevated level from the reference range

↓ Represents lessened level from the reference range

* This research uses only tests that were developed, and its performance characteristics are determined by RSM Diagnostics. It has not been cleared or approved by the food and drug administration.

◆ COMMENSAL BACTERIA

BACTERIA	RESULT	RANGE
Akkermansia muciniphila	ND	1E3-1E12
Bacteroides fragilis	2E5	1E3-1E12
Enterococcus faecalis	ND	1E3-1E12
Enterococcus faecium	ND	1E3-1E12
Fusobacterium	2E5	1E3-1E12
Faecalibacterium prausnitzii	2E5	1E3-1E12
Roseburia spp.	2E5	1E3-1E12

◆ COMMENSAL INFLAMMATORY & AUTOIMMUNE BACTERIA

BACTERIA	RESULT	RANGE
Fusobacterium spp.	Not Detected	<1E3
Prevotella spp.	Not Detected	<1E3
Clostridium perfringens	Not Detected	<1E3
Sutterella spp.	Not Detected	<1E3

◆ COMMENSAL OVERGROWTH BACTERIA

BACTERIA	RESULT	RANGE
Desulfovibrio spp.	Not Detected	<1E3
Methanobacteriaceae (Family)	Not Detected	<1E3

- The results are shown using scientific notation, where the letter "E" represents the exponent (e.g., 1.2E6 means 1.2×10^6 or 1,200,000). the bar graph displays values from 1E3 to 1E12, which is the test's detection range.
- "ND" Means the pathogen is not detected and is shown as a gray-shaded area with no indicator. "<dl" means the pathogen is present but below the detection limit; in this case, the indicator points to the start of the graph (1E3) without any color change.
- The bar graph also uses colors to show levels of commensal bacteria: yellow for low and green for high where result value is $\geq 1E3$ to $\leq 1E5$ represents low and value $> 1E5 <= 1E12$ represents high.

VIRUSES

VIRUSES	RESULT
Enterovirus	Not Detected
Human adenovirus (HAdV)	Not Detected
Human astrovirus (HAtV)	Not Detected
Human norovirus (HNoV) G1	Not Detected
Human norovirus (HNoV) G2	Not Detected
Human rotavirus (HRTV)	Not Detected
Human sapovirus (HSaV)	Not Detected

PATHOGENIC BACTERIA

BACTERIA	RESULT	RANGE
Campylobacter	Not Detected	<1E3
Clostridium difficile	Not Detected	<1E3
Enterohemorrhagic/verotoxin producing Escherichia coli (EHEC)	Not Detected	<1E3
Enteroinvasive Escherichia coli (EIEC)	Not Detected	<1E3
Salmonella enterica	Not Detected	<1E3
Shiga-Like Toxin E. coli Stx1	Not Detected	<1E3
Shiga-Like Toxin E. coli Stx2	Not Detected	<1E3
Yersinia enterocolitica	Not Detected	<1E3
Helicobacter pylori	Not Detected	<1E3

FUNGUS

FUNGUS	RESULT
Candida (Pan-Candida)	Not Detected
Candida albicans	Not Detected
Candida glabrata	Not Detected

◆ PARASITES

PARASITES	RESULT	RANGE
Cryptosporidium	Not Detected	<1E3
Entamoeba histolytica	Not Detected	<1E3
Giardia lamblia	Not Detected	<1E3

◆ DYSDIOTIC & OVERGROWTH

BACTERIA	RESULT	RANGE
Enterococcus faecalis	Not Detected	<1E3
Enterococcus faecium	Not Detected	<1E3
Morganella morganii	Not Detected	<1E3
Pseudomonas aeruginosa	Not Detected	<1E3
Staphylococcus aureus	Not Detected	<1E3
Streptococcus agalactiae (Group B)	Not Detected	<1E3
Streptococcus pneumoniae	Not Detected	<1E3
Streptococcus pyogenes	Not Detected	<1E3

◆ INFLAMMATORY & AUTOIMMUNE BACTERIA

BACTERIA	RESULT	RANGE
Acinetobacter baumannii	Not Detected	<1E3
Citrobacter koseri	Not Detected	<1E3
Citrobacter Freundii	Not Detected	<1E3
Klebsiella pneumoniae, oxytoca	Not Detected	<1E3
Proteus mirabilis	Not Detected	<1E3
Mycobacterium avium	Not Detected	<1E3
Mycoplasma pneumonia	Not Detected	<1E3
Chlamydia trachomatis	Not Detected	<1E3

ANTIBIOTIC RESISTANCE GENES

◆ B - LACTAMS	
RESISTANCE GENES	RESULT
ACT-1/3/2/34	Not Detected
AMPC	Not Detected
CTX-M 1	Not Detected
CTX-M 2	Not Detected
CTX-M 8	Not Detected
CTX-M 9	Not Detected
OXA-1	Not Detected

◆ MACROLIDES	
RESISTANCE GENES	RESULT
ERMA	Not Detected
ERMB	Not Detected
ERMC	Not Detected

◆ SULFONAMIDES	
RESISTANCE GENES	RESULT
SULFAMETHOXAZOLE 1 (SUL1)	Not Detected
SULFAMETHOXAZOLE 1 (SUL2)	Not Detected

◆ METHICILLIN	
RESISTANCE GENES	RESULT
MECA	Not Detected

◆ VANCOMYCIN	
RESISTANCE GENES	RESULT
VANCOMYCIN AB	Not Detected

◆ B - LACTAMS	
RESISTANCE GENES	RESULT
FOX-17	Not Detected
IMP-1	Not Detected
IMP-2	Not Detected
VIM-1	Not Detected
VIM-2	Not Detected
NDM-1	Not Detected

◆ FLUOROQUINOLONES	
RESISTANCE GENES	RESULT
QUINOLONE A	Not Detected
QUINOLONE B	Not Detected

◆ TETRACYCLINE	
RESISTANCE GENES	RESULT
TETRACYCLINE B	Not Detected
TETRACYCLINE M	Not Detected

◆ TRIMETHOPRIM	
RESISTANCE GENES	RESULT
DFRA1	Not Detected
DFRA5	Not Detected

GI PARASITOLOGY

◆ NORMAL FLORA / COMMENSAL			
PARASITES	RESULT		
Blastocystis hominis	—		
Endolimax nana	—		
Chilomastix mesnili	—		
Entamoeba coli cyst	—		
Entamoeba coli	—		
◆ MAST CELL ACTIVATION & IMMUNE MEDIATED			
PARASITES	RESULT		
Dientamoeba fragilis troph	—		
Dientamoeba fragilis cyst	—		
Giardia lamblia	—		
Blastocystis	—		
◆ MALABSORPTIVE / OSMOTIC DIARRHEA-CAUSING			
PARASITES	RESULT		
Giardia lamblia cyst	—		
Cryptosporidium spp.	—		
Giardia Lamblia cyst	—		
◆ DIRECT MUCOSAL INVADERS & INFLAMMATORY			
PARASITES	RESULT		
Entamoeba histolytica	—		
Entamoeba histolytica cyst	—		
Balantidium coli	—		
Strongyloides stercoralis	—		
◆ LARGE-BURDEN & LUMINAL OBSTRUCTION			
PARASITES	RESULT		
Ascaris lumbricoides ova	—		
Cystoisopora spp.	—		
Cyclospora cayetanensis	—		
Hymenolepis nana	—		
◆ MUCOSAL “NIPPERS” & BLOOD FEEDERS			
PARASITES	RESULT		
Ancylostoma duodenale	—		
Necator americanus	—		
Hookworm ova	—		
Trichuris trichiura ova	—		
◆ AUTOINFECTION & HYPERINFECTION RISK			
PARASITES	RESULT		
Strongyloides Stercoralis	—		
◆ CYST			
CYST	RESULT	CYST	RESULT
Acanthamoeba polyphaga cyst	—	Entamoeba nana cyst	—
Cryptosporidium (Oocyst)	—	Congylomena pulchrum	—
Dientamoeba fragilis cyst	—	Isospora belli sporocyst	—
Toxoplasma gondii oocyst	—		

Detected — Not Detected

◆ OVA			
OVA	RESULT	OVA	RESULT
Capillaria hepatica ova	—	Hymenolepis nana ova	—
Diphyllobothrium latum ova	—	Giardia lamblia	—
Entamoeba hortense ova	—	Iodamoeba buetschlii	—
Entamoeba pancreaticum ova	—	Metagonimus yokogawai ova	—
Enterobius vermicularis ova	—	Opisthorchis viverrini ova	—
Fasciola hepatica ova	—	Schistosoma japonicum ova	—
Fasciolopsis buski ova	—	Schistosoma mansoni ova	—
Hymenolepis diminuta ova	—	Taenia ova	—
Theileria orientalis ova	—		

◆ PARASITES			
PARASITES	RESULT	PARASITES	RESULT
Acanthamoeba polyphaga	—	Enterobius vermicularis	—
Capillaria philippinensis	—	Iodamoeba buetschlii	—
Chilomastix mesnili	—	Isospora	—
Chylomastix hominis	—	Metagonimus yokogawai	—
Chylomastix mednili	—	Paragonimus spp.	—
Clonorchis sinensis	—	Sarcocystis	—
Cryptosporidium spp.	—	Theileria orientalis	—
Diphyllobothrium latum	—	Toxoplasma gondii	—
Dipylidium caninum	—	Trichinella spirali	—
Entamoeba cell	—	Trichomonads	—
Entamoeba cell trophozoite	—	Trichomonas vaginalis	—

⚠ Detected — Not Detected

◆ BENEFICIAL FLORA

MICROBES	RESULT	GROWTH
Bacteroides Family	+4	
Bifidobacterium Family	+4	
Clostridial Family	+4	
Lactobacillus Family	+4	

◆ OPPORTUNISTIC / OVERGROWTH BACTERIA*

MICROBES	RESULT	GROWTH
Klebsiella pneumoniae	+4	

◆ PATHOGENIC BACTERIA

MICROBES	RESULT	GROWTH
Campylobacter spp.	+4	
Enterohemorrhagic E. coli (EHEC) - O157:H7	+4	
Salmonella spp.	+4	
Shigella spp.	+4	
Yersinia enterocolitica	+4	

- No growth detected
- Shows the growth of beneficial flora by the quadrant streak method
- Shows bacterial pathogens' growth by the quadrant streak method
- Opportunistic / Overgrowth bacteria: Not reporting antimicrobial sensitivity

◆ ANTIMICROBIAL SENSITIVITY

ANTIBIOTICS	RESULT	
Ampicillin	Resistant	☐
Amoxicillin	Resistant	☒
Amoxicillin/clavulanate	Resistant	☐
Cefdinir	Resistant	☒
Cephalexin	Resistant	☐
Cefoxitin	Resistant	☒
Clindamycin	Resistant	☐
Doxycycline	Resistant	☐
Erythromycin	Resistant	☐
Metronidazole	Resistant	☐
Penicillin	Resistant	☐
Trimethoprim/sulphamethoxazole	Resistant	☐
Vancomycin	Resistant	☐

◆ NATURAL AGENT SENSITIVITY

NATURAL AGENTS	INHIBITION	
Alchornea	No	
Argentyn Silver	No	
Clove	No	
Cryptolepis	High	
Caprylic Acid	No	
Garlic	Low	
Juniper	No	
Oil Of Oregano	Low	
Oregon Grape	No	
Red Root	No	
Stevia	No	
Uva Ursi	No	



Represents the antibiotic is sensitive against the microbes



Represents the antibiotic is resistant against the microbes

In this assay, inhibition is defined as the reduction level on organism growth as a direct result of inhibition by a substance. the level of inhibition is an indicator of how effective the substance was at limiting the growth of an organism in an in vitro environment. high inhibition indicates a greater ability by the substance to limit growth, while low inhibition a lesser ability to limit growth. the designated natural products should be considered investigational in nature and not be viewed as standard clinical treatment substances

◆ FUNGAL CULTURE

MICROBES	RESULT	GROWTH
Rhodotorula spp.	+4	

◆ ANTIFUNGAL SENSITIVITY

ANTIFUNGAL	RESULT	
Amphotericin-B	Resistant	
Clotrimazole	Resistant	
Fluconazole	Resistant	
Itraconazole	Resistant	
Ketoconazole	Resistant	
Nystatin	Resistant	
Voriconazole	Resistant	

◆ NATURAL AGENT SENSITIVITY

NATURAL AGENTS	INHIBITION	
Alchornea	No	
Argentyn Silver	No	
Clove	No	
Cryptolepis	High	
Caprylic Acid	No	
Garlic	Low	
Juniper	No	
Oil Of Oregano	Low	
Oregon Grape	No	
Red Root	No	
Stevia	No	
Uva Ursi	No	



Represents the antifungal is sensitive against the microbes



Represents the antifungal is resistant against the microbes

Shows microbial growth by quadrant streak method

In this assay, inhibition is defined as the reduction level on organism growth as a direct result of inhibition by a substance. the level of inhibition is an indicator of how effective the substance was at limiting the growth of an organism in an in vitro environment. high inhibition indicates a greater ability by the substance to limit growth, while low inhibition a lesser ability to limit growth. the designated natural products should be considered investigational in nature and not be viewed as standard clinical treatment substances

◆ CALPROTECTIN

- Calprotectin is a protein found in white blood cells, particularly in neutrophils. Calprotectin becomes available in the intestinal lumen via leukocyte shedding, active secretion, cell disturbance, and cell death. Elevated levels of calprotectin in stool samples can indicate inflammation in the intestines. Fecal calprotectin is associated with conditions such as inflammatory bowel disease (ibd).

◆ PANCREATIC ELASTASE

- Elastase is an enzyme produced by the pancreas that helps break down proteins, fats and carbohydrates. It plays a crucial role in the digestion process by breaking down dietary proteins into smaller peptides and amino acids, which can be absorbed by the body
- Low levels of elastase in the stool may suggest pancreatic insufficiency. Testing for elastase levels in stool samples is a noninvasive method to assess pancreatic function.

◆ ANTI GLIADIN ANTIBODIES

- Anti gliadin antibodies directed against gliadin, a component of gluten found in wheat and other related grains such as barley and rye. these antibodies are relevant in the context of gluten related disorders, particularly celiac disease. May indicate an immune response to gluten, but not specific to celiac disease. if positive further testing is advised

◆ SECRETARY IGA

- Secretory iga (siga) is a type of immunoglobulin a that plays a critical role in the immune function of mucosal membranes. siga is predominantly found in mucosal secretions such as saliva, tears, colostrum, and gastrointestinal, respiratory, and urogenital tracts. it is the first line of defense against pathogens.
- SIgA Protects against infections in the mucosal surface, low levels of SIgA are associated with increased susceptibility to infections in the GI tract.
- Measurement of SIgA levels can be useful in diagnosing certain immunodeficiencies and monitoring mucosal immunity

◆ ZONULIN

- Zonulin is a protein that plays a critical role in regulating intestinal permeability. it is involved in the modulation of tight junctions between the cells lining the intestinal wall.
- Elevated zonulin levels can indicate increased gut permeability, which may lead further investigation and management of underlying conditions. elevated zonulin may be associated with autoimmune disease, inflammatory bowel disease, celiac disease, and metabolic disease.
- Zonulin release may be triggered by bacteria, gluten and certain dietary compounds.

Disclaimer

The assays are lab developed tests and/or the performance characteristics determined by RSM diagnostics lab. RSM diagnostics lab is a CLIA approved lab all laboratory test results should be interpreted by a healthcare professional who can integrate these results with clinical symptoms, medical history, and other diagnostic tests. Self diagnosis and treatment based on lab test results alone can be harmful.

RSM DIAGNOSTICS LAB

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