Diagnostic Solutions laboratory

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GI-MAP ™ DNA Stool Analysis

Patient: **Ima Sample**
Collected: 2/10/2018
DOB: 7/11/1981

Accession: 20180212-0001
Received: 2/12/2018
Completed: 1/9/2019

Ordered by: **Diane Farhi, MD**

Pathogens

Bacterial Pathogens	Result		Normal
Campylobacter	**<dl**		<1.00e3
C. difficile, Toxin A	**1.21e5**	**High**	<1.00e3
C. difficile, Toxin B	**2.27e5**	**High**	<1.00e3
Enterohemorrhagic E. coli	**<dl**		<1.00e3
E. coli O157	**8.60e0**		<1.00e3
Enteroinvasive E. coli/Shigella	**<dl**		<1.00e2
Enterotoxigenic E. coli LT/ST	**<dl**		<1.00e3
Shiga-like Toxin *E. coli* stx1	**<dl**		<1.00e3
Shiga-like Toxin *E. coli* stx2	**<dl**		<1.00e3
Salmonella	**<dl**		<1.00e4
Vibrio cholerae	**<dl**		<1.00e5
Yersinia enterocolitica	**4.46e1**		<1.00e5

Parasitic Pathogens	Result	Normal
Cryptosporidium	**<dl**	<1.00e6
Entamoeba histolytica	**<dl**	<1.00e4
Giardia	**<dl**	<5.00e3

Viral Pathogens	Result	Normal
Adenovirus 40/41	**<dl**	<1.00e10
Norovirus GI/II	**<dl**	<1.00e7

The assays were developed and the perfomance characteristics determined by Diagnostic Solutions Laboratory.

CLIA# 11D-2097795
Medical Director - Diane Farhi, MD

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H. pylori

	Result		Normal
Helicobacter pylori	**2.9e3**	**High**	<1.0e3
Virulence Factor, babA	**Positive**		Negative
Virulence Factor, cagA	**Positive**		Negative
Virulence Factor, dupA	**Negative**		Negative
Virulence Factor, iceA	**Negative**		Negative
Virulence Factor, oipA	**Negative**		Negative
Virulence Factor, vacA	**Negative**		Negative
Virulence Factor, virB	**Positive**		Negative
Virulence Factor, virD	**Positive**		Negative

Normal Bacterial Flora

	Result		Normal
Bacteroides fragilis	**1.1e11**		1.60e9 - 2.50e11
Bifidobacterium spp.	**2.4e10**		>6.70e7
Enterococcus spp.	**4.9e7**		>1.9e5 - 2.00e8
Escherichia spp.	**6.1e5**	**Low**	3.70e6 - 3.80e9
Lactobacillus spp.	**3.7e4**	**Low**	8.6e5 - 6.20e8
Clostridia (class)	**6.25e6**		5.00e5 - 5.00e7
Enterobacter spp.	**9.16e6**		1.00e6 - 5.00e7
Akkermansia mucinophilia	**1.76e6**	**High**	1.0e1 - 5.0e4
Faecalbacterium prausnitzii	**9.56e5**		1.0e3 - 5.0e8

Phyla Microbiota	Result		Normal
Bacteroidetes	**4.33e11**	**Low**	8.61e11 - 3.31e12
Firmicutes	**1.25e11**		5.70e10 - 3.04e11
Firmicutes:Bacteroidetes Ratio	**0.29**		<1.00

Opportunistic Bacteria

Additional Dysbiotic/Overgrowth Bacteria	Result		Normal
Bacillus spp.	**8.30e4**		<1.50e5
Enterococcus faecalis	**2.56e3**		<1.00e4
Enterococcus faecium	**1.11e3**		<1.00e4
Morganella spp.	**<dl**		<1.00e3
Pseudomonas spp.	**7.37e4**	**High**	<1.00e4
Pseudomonas aeruginosa	**<dl**		<5.00e2
Staphylococcus spp.	**1.93e4**	**High**	<1.00e4
Staphylococcus aureus	**1.23e1**		<5.00e2
Streptococcus spp.	**1.34e3**	**High**	<1.00e3
Methanobacteriaceae (family)	**3.70e7**		<5.00e9

Potential Autoimmune Triggers	Result		Normal
Citrobacter spp.	**<dl**		<5.00e6
Citrobacter freundii	**<dl**		<5.00e5
Klebsiella spp.	**2.48e4**	**High**	<5.00e3
Klebsiella pneumoniae	**1.41e4**		<5.00e4
M. avium subsp. paratuberculosis	**<dl**		<5.00e3
Prevotella spp.	**<dl**		<1.00e8
Proteus spp.	**<dl**		<5.00e4
Proteus mirabilis	**<dl**		<1.00e3
Fusobacterium spp.	**6.16e5**		<1.00e8

Fungi/Yeast

	Result		Normal
Candida spp.	**<dl**		<5.00e3
Candida albicans	**<dl**		<5.00e2
Geotrichum spp.	**<dl**		<3.00e2
Microsporidium spp.	**<dl**		<5.00e3
Rodotorula spp.	**<dl**		<1.00e3

Viruses

	Result		Normal
Cytomegalovirus	**<dl**		<1.00e5
Epstein Barr Virus	**<dl**		<1.00e7

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Parasites

Protozoa	Result		Normal
Blastocystis hominis	**<dl**		<2.00e3
Chilomastix mesnili	**<dl**		<1.00e5
Cyclospora spp.	**<dl**		<5.00e4
Dientamoeba fragilis	**<dl**		<1.00e5
Endolimax nana	**<dl**		<1.00e4
Entamoeba coli	**<dl**		<5.00e6
Pentatrichomonas hominis	**<dl**		<1.00e2

Worms	Result		Normal
Ancylostoma duodenale	**Not Detected**		Not Detected
Ascaris lumbricoides	**Not Detected**		Not Detected
Necator americanus	**Not Detected**		Not Detected
Trichuris trichiura	**Not Detected**		Not Detected
Taenia spp.	**Not Detected**		Not Detected

Intestinal Health

Digestion	Result		Normal
Steatocrit	**6**		<15 %
Elastase-1	**388**		>200 ug/g

GI Markers	Result		Normal
b-Glucuronidase	**2584**	**High**	<2486 U/mL
Occult Blood - FIT	**4**		<10 ug/g

Immune Response	Result		Normal
Secretory IgA	**1873**		510 - 2010 ug/g
Anti-gliadin IgA	**15**		0 - 157 U/L

Inflammation	Result		Normal
Calprotectin	**22**		<173 ug/g

Add-on Test	Result		Normal
Zonulin	**186.4**	**High**	<107 ng/g

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Antibiotic Resistance Genes, phenotypes

Helicobacter		Result			Expected Result
Amoxicillin		**Negative**			Absent
A926G	Absent	AGA926-928TTC	Absent		
Clarithromycin		**Positive**			Absent
A2142C	Absent	A2142G	Absent	A2143G	Present
Fluoroquinolones		**Negative**			Absent
gyrA N87K	Absent	gyrA D91N	Absent	gyrA D91G	Absent
gyrB S479N	Absent	gyrB R484K	Absent		
Tetracycline		**Positive**			Absent
PBP1A S414R	Present	PBP1A T556S	Absent	PBP1A N562Y	Absent

Antibiotic Resistance Genes, genotypes

Universal Microbiota Resistance Genes

b-lactamase		**Positive**			Absent
TEM-70	Absence	CTXM3	Presence	SHV-24	Presence
VEB-1	Absence	OXA-30	Absence	CTXM35	Absence
toho-3	Absence	CTXM63	Absence	PER-1	Absence
PER-2	Presence	GES-3	Absence	NDM-1	Absence
Fluoroquinolones		**Negative**			Absent
qnrA2	Absence	qnrB	Absence		
Macrolides		**Positive**			Absent
ermA	Absence	ermB	Presence	ermC	Absence
mefE	Absence				
Vancomycin		**Negative**			Absent
vanA1	Absence	vanA2	Absence	vanB	Absence
vanC	Absence				