



5895 Shiloh Rd Ste 101
 Alpharetta GA 30005
 877-485-5336

GI-MAP™ DNA Stool Analysis

Patient: Jane Doe
 Collected: 07/24/2017
 DOB: 12/19/1971

Accession: 20170724-0102
 Received: 07/24/2017
 Completed: 07/31/2017

Ordered by: Diane Farhi, MD

| Pathogens | | | |
|--|----------|------|----------|
| Bacterial Pathogens | Result | | Expected |
| <i>Campylobacter</i> | <dl | | <dl |
| <i>C. difficile</i> Toxin A | <dl | | <dl |
| <i>C. difficile</i> Toxin B | <dl | | <dl |
| Enterohemorrhagic <i>E. coli</i> | <dl | | <dl |
| <i>E. coli</i> O157 | <dl | | <dl |
| Enteroinvasive <i>E. coli/Shigella</i> | <dl | | <dl |
| Enteropathogenic <i>E. coli</i> | <dl | | <dl |
| Enterotoxigenic <i>E. coli</i> LT/ST | <dl | | <dl |
| Shiga-like Toxin <i>E. coli</i> stx1 | <dl | | <dl |
| Shiga-like Toxin <i>E. coli</i> stx2 | <dl | | <dl |
| <i>Salmonella</i> | 6.4 e2 | Low | <dl |
| <i>Vibrio cholerae</i> | <dl | | <dl |
| <i>Yersinia enterocolitica</i> | <dl | | <dl |
| Parasitic Pathogens | | | |
| <i>Cryptosporidium</i> | <dl | | <dl |
| <i>Entamoeba histolytica</i> | <dl | | <dl |
| <i>Giardia</i> | <dl | | <dl |
| Viral Pathogens | | | |
| Adenovirus 40/41 | 2.3 e3 | High | <dl |
| Norovirus GI | <dl | | <dl |
| Norovirus GII | <dl | | <dl |
| H. pylori | | | |
| <i>Helicobacter pylori</i> | 4.03 E6 | High | <7.0 E3 |
| Virulence Factor, babA | Negative | | Neg |
| Virulence Factor, cagA | Negative | | Neg |
| Virulence Factor, cagPAI | Negative | | Neg |
| Virulence Factor, dupA | Negative | | Neg |
| Virulence Factor, iceA | Negative | | Neg |
| Virulence Factor, opiA | Negative | | Neg |
| Virulence Factor, vacA | Positive | | Neg |

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Normal/Commensal Bacterial Flora

| | | | |
|-----------------------------|--------|------|-----------------|
| <i>Bacteroides fragilis</i> | 6.2 E7 | | 5.0 E5 - 3.2 E9 |
| <i>Bifidobacterium spp.</i> | 9.5 E7 | Low | >8.9 E9 |
| <i>Clostridium spp.</i> | 2.9 e5 | | 1.2 E3 - 3.1 E5 |
| <i>Enterobacter spp.</i> | 2.0 e5 | | 1.2 E3 - 3.1 E5 |
| <i>Enterococcus spp.</i> | 4.2 E8 | High | 1.0 E4 - 7.6 E7 |
| <i>Escherichia spp.</i> | 4.4 e7 | | 1.0 E6 - 5.8 E9 |
| <i>Lactobacillus spp.</i> | 8.1 e3 | Low | 1.0 E5 - 2.8 E7 |

Phyla Microbiota

| | | | |
|--------------------------------|---------|--|----------|
| <i>Bacteroidetes</i> | 1.3 e10 | | >5.0 e9 |
| <i>Firmicutes</i> | 2.4 e12 | | <5.0 e13 |
| Furmicutes/Bacteroidetes Ratio | 7.1 | | <8.0 |

Opportunistic Bacteria

| Potential Autoimmune Triggers | Result | | Range |
|--|--------|------|---------|
| <i>Citrobacter spp.</i> | 8.1 E6 | High | <1.0 E4 |
| <i>Citrobacter freundii</i> | <dl | | <1.0 E3 |
| <i>Klebsiella spp.</i> | <dl | | <1.0 E3 |
| <i>Klebsiella pneumoniae</i> | <dl | | <7.2 E3 |
| <i>Mycobacterium avium</i> | <dl | | <1.0 E3 |
| <i>Prevotella copri</i> | 6.7 e5 | High | <1.0 E4 |
| <i>Proteus spp.</i> | 1.2 E3 | | <6.2 E3 |
| <i>Proteus mirabilis</i> | <dl | | <1.0 E3 |
| <i>Yersinia enterocolytica (from pg 1)</i> | <dl | | <1.0 E2 |

Additional Dysbiotic/Overgrowth Bacteria

| | | | |
|-------------------------------|--------|------|---------|
| <i>Bacillus spp.</i> | <dl | | <1.0 E3 |
| <i>Enterococcus faecalis</i> | <dl | | <1.0 E3 |
| <i>Enterococcus faecium</i> | <dl | | <1.0 E3 |
| <i>Morganella morganii</i> | <dl | | <1.0 E3 |
| <i>Pseudomonas spp.</i> | 1.2 E3 | | <2.5 E3 |
| <i>Pseudomonas aeruginosa</i> | 5.3 E5 | High | <1.0 E3 |
| <i>Staphylococcus spp.</i> | <dl | | <1.0 E4 |
| <i>Staphylococcus aureus</i> | 9.2 E4 | High | <1.0 E3 |
| <i>Streptococcus spp.</i> | <dl | | <1.0 E3 |

Fungi/yeast:

| | | | |
|---------------------------|--------|------|---------|
| <i>Candida albicans</i> | 8.7 e5 | High | <1.0 E3 |
| <i>Candida spp.</i> | <dl | | <1.0 E3 |
| <i>Geotricum spp.</i> | <dl | | <1.0 E3 |
| <i>Microsporidia spp.</i> | <dl | | <1.0 E3 |
| <i>Rhodoturula spp.</i> | 4.1 e2 | | <1.0 E3 |
| <i>Trichosporon spp.</i> | <dl | | <1.0 E3 |

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Viruses**Opportunistic Viruses**

| | | | |
|-------------------------------|--------|------|-----|
| <i>CMV- Cytomegalovirus</i> | 8.7 e4 | High | <dl |
| <i>EBV- Epstein Bar Virus</i> | <dl | | <dl |

Parasites**Protozoa**

| | | | |
|---------------------------------|--------|------|-----|
| <i>Blastocystis hominis</i> | 8.7 e4 | High | <dl |
| <i>Chilomastix mesnelli</i> | <dl | | <dl |
| <i>Cyclospora cayetanensis</i> | <dl | | <dl |
| <i>Dientamoeba fragilis</i> | <dl | | <dl |
| <i>Endolimax nana</i> | <dl | | <dl |
| <i>Entamoeba coli</i> | <dl | | <dl |
| <i>Pentatrichomonas hominis</i> | <dl | | <dl |

Worms

| | | | |
|-------------------------------|----------|--|-----|
| <i>Ancylostoma duodenale</i> | Negative | | Neg |
| <i>Ascaris lumbricoides</i> | Negative | | Neg |
| <i>Necator americanis</i> | Negative | | Neg |
| <i>Trichuris trichiura</i> | Negative | | Neg |
| <i>Taenia solium/saginada</i> | Negative | | Neg |

Intestinal Health

| Digestion | Result | | Range |
|------------|--------|-----|-----------|
| Elastase-1 | 196 | Low | >200 ug/g |
| Steatocrit | 13 | | <15% |

Immune Response

| | | | |
|-------------------|-----|-----|---------------|
| SIgA | 406 | Low | 510-2010 ug/g |
| Anti-gliadin SIgA | 67 | | 0-157 U/L |

Inflammation

| | | | |
|--------------|----|------|----------|
| Calprotectin | 75 | High | <50 ug/g |
|--------------|----|------|----------|

GI Markers

| | | | |
|-----------------|----------|--|------------|
| b-Glucuronidase | 1745 | | <2457 U/mL |
| Occult blood | Negative | | neg |

Add-on Test

| | | | |
|---------|-----|------|--------|
| Zonulin | 167 | High | 30-107 |
|---------|-----|------|--------|

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Antibiotic Resistance Genes, phenotypes

Helicobacter

| | | |
|------------------|-----------------|-----|
| Clarithromycin | Positive | Neg |
| Fluoroquinolones | Negative | Neg |

Antibiotic Resistance Genes, genotypes

Universal Microbiota Resistance Genes

| | | |
|--------------------|-----------------|-----|
| B-lactamase | Positive | Neg |
|--------------------|-----------------|-----|

Genes associated to B-lactamase resistance

| | | | | | |
|------------|----------------|-------------|--------|----------|--------|
| blatem-70 | Present | SHV-24 | Absent | blaPER-1 | Absent |
| blaCTX-M-3 | Absent | blaCTX-M-35 | Absent | blaPER-2 | Absent |
| bla-VEB-1 | Absent | blatoho-3 | Absent | blaGES-3 | Absent |
| blaOXA-30 | Absent | blaCTX-M-63 | Absent | blaNDM-1 | Absent |

| | | |
|-------------------------|-----------------|-----|
| Fluoroquinolones | Negative | Neg |
|-------------------------|-----------------|-----|

| | | | |
|-------|--------|------|--------|
| qnrA2 | Absent | qnrB | Absent |
|-------|--------|------|--------|

| | | |
|-------------------|-----------------|-----|
| Macrolides | Positive | Neg |
|-------------------|-----------------|-----|

| | | | | | |
|------|--------|------|----------------|------|--------|
| ermA | Absent | ermB | Present | ermC | Absent |
| mefE | Absent | | | | |

| | | |
|-------------------|-----------------|-----|
| Vancomycin | Negative | Neg |
|-------------------|-----------------|-----|

| | | | | | |
|-------|--------|-------|--------|------|--------|
| vanA1 | Absent | vanA2 | Absent | vanB | Absent |
| vanC | Absent | | | | |