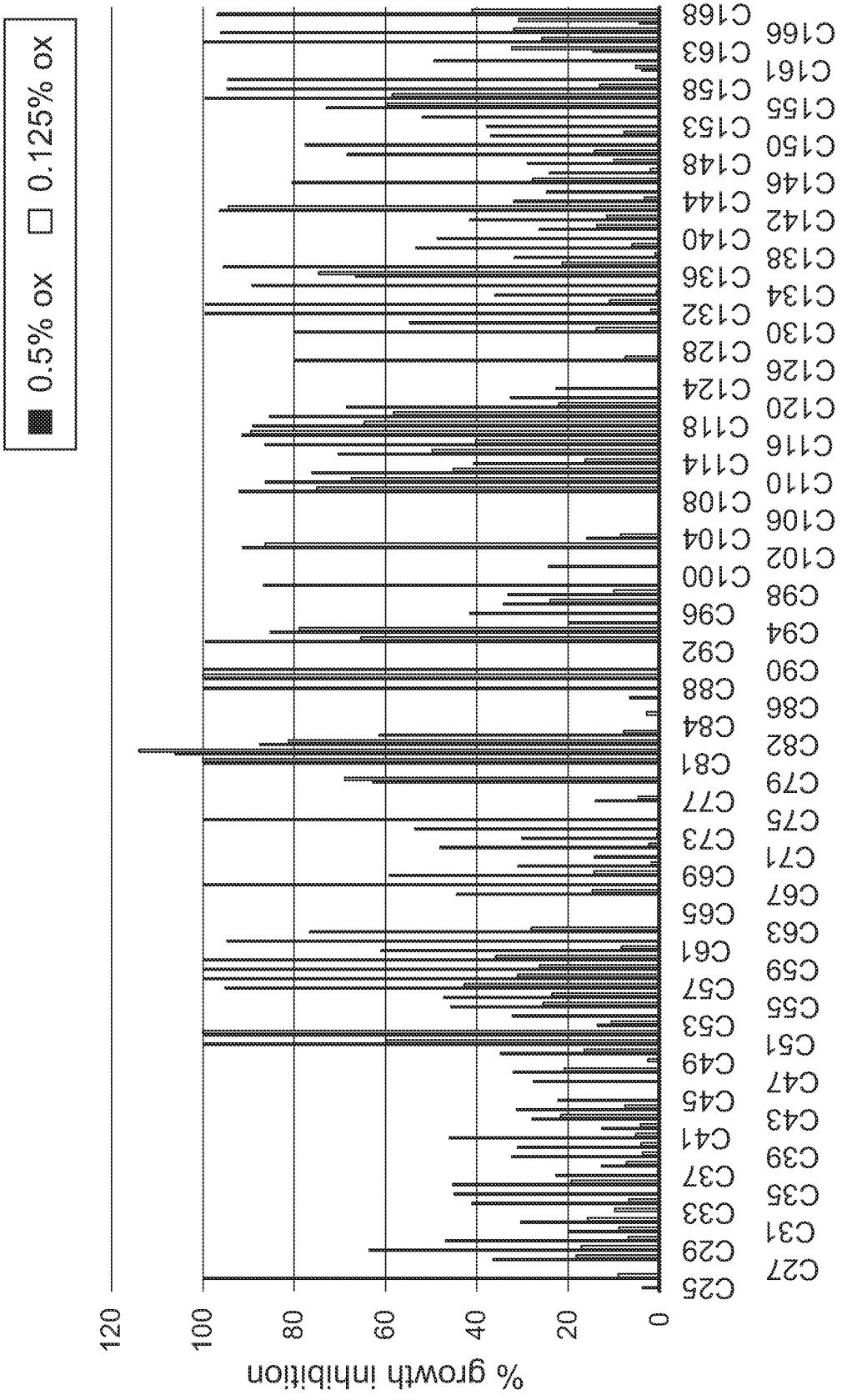

0.5% ox
0.125% ox
% growth inhibition
120
100
80
60
40
20
0
C168
C166
C163
C161
C158
C155
C153
C150
C148
C146
C144
C142
C140
C138
C136
C134
C132
C130
C128
C126
C124
C120
C118
C116
C114
C110
C108
C106
C104
C102
C100
C98
C96
C94
C92
C90
C88
C86
C84
C82
C81
C79
C77
C75
C73
C71
C69
C67
C65
C63
C61
C59
C57
C55
C53
C51
C49
C47
C45
C43
C41
C39
C37
C35
C33
C31
C29
C27
C25

FIG. 1

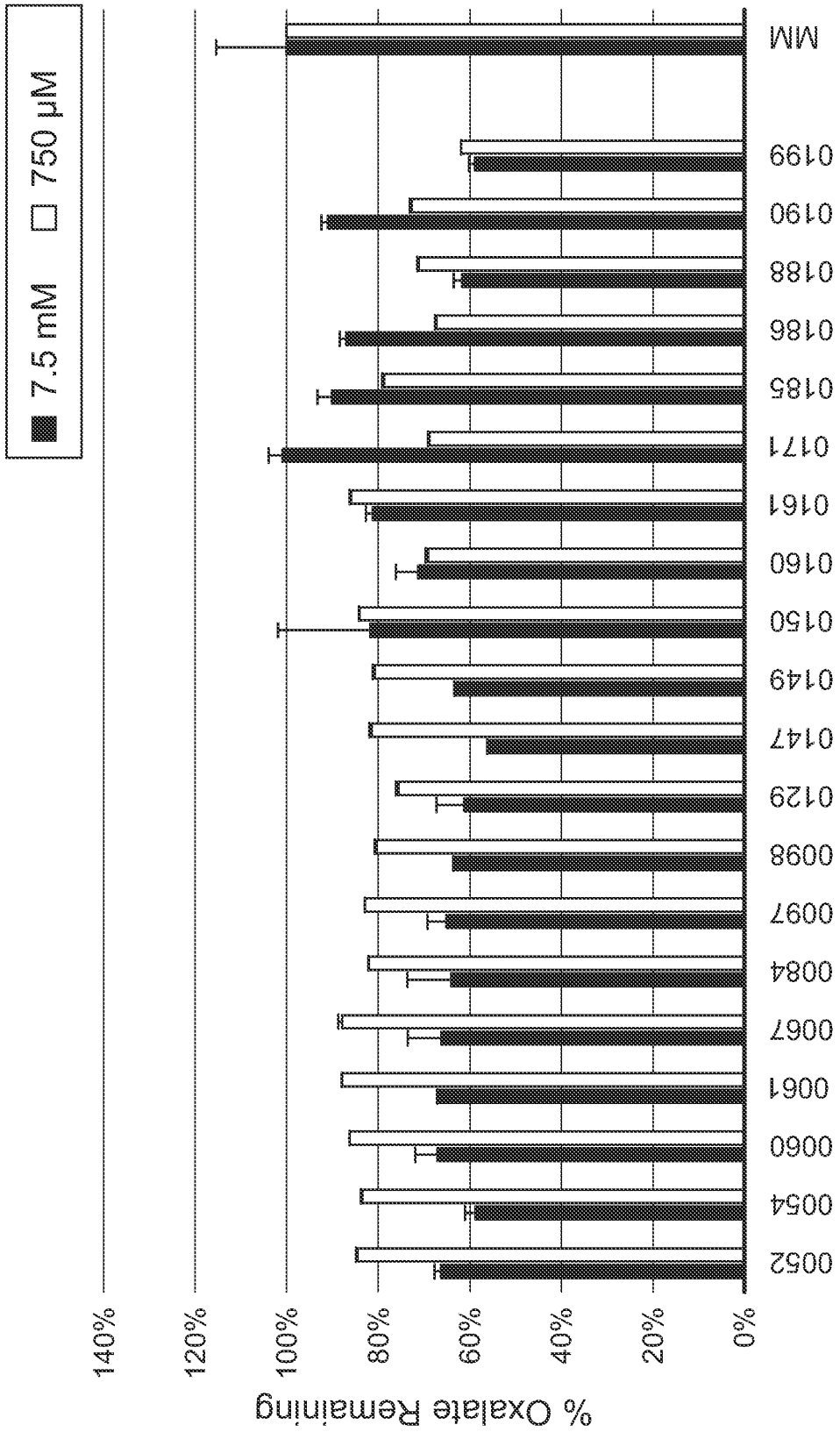

7.5 mM
750 µM
% Oxalate Remaining
140%
120%
100%
80%
60%
40%
20%
0%
MM
0199
0190
0188
0186
0185
0171
0161
0160
0150
0149
0147
0129
0098
0097
0084
0067
0061
0060
0054
0052

FIG. 2A

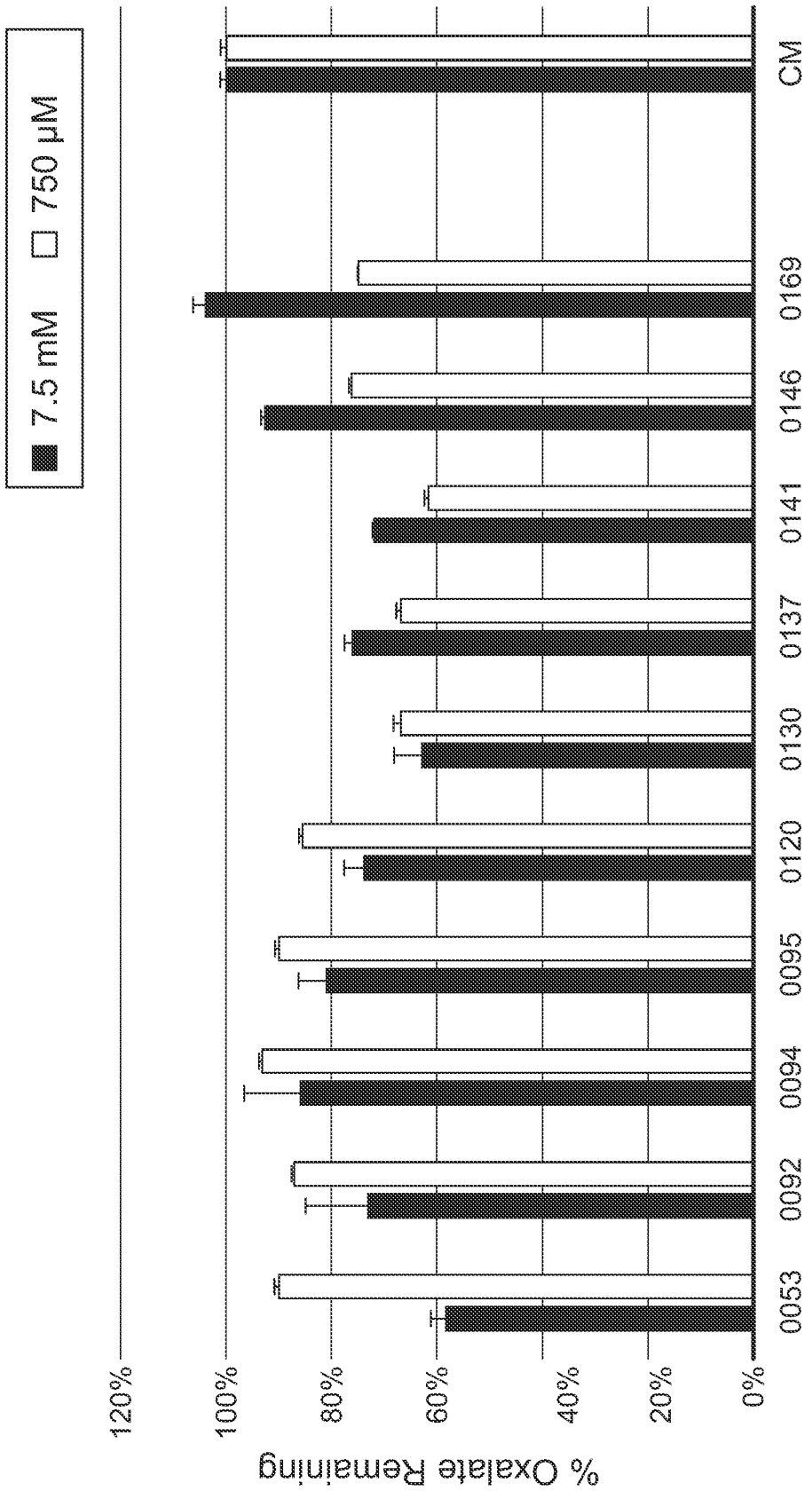

7.5 mM
750 µM
% Oxalate Remaining
120%
100%
80%
60%
40%
20%
0%
0053
0092
0094
0095
0120
0130
0137
0141
0146
0169
CM

FIG. 2B

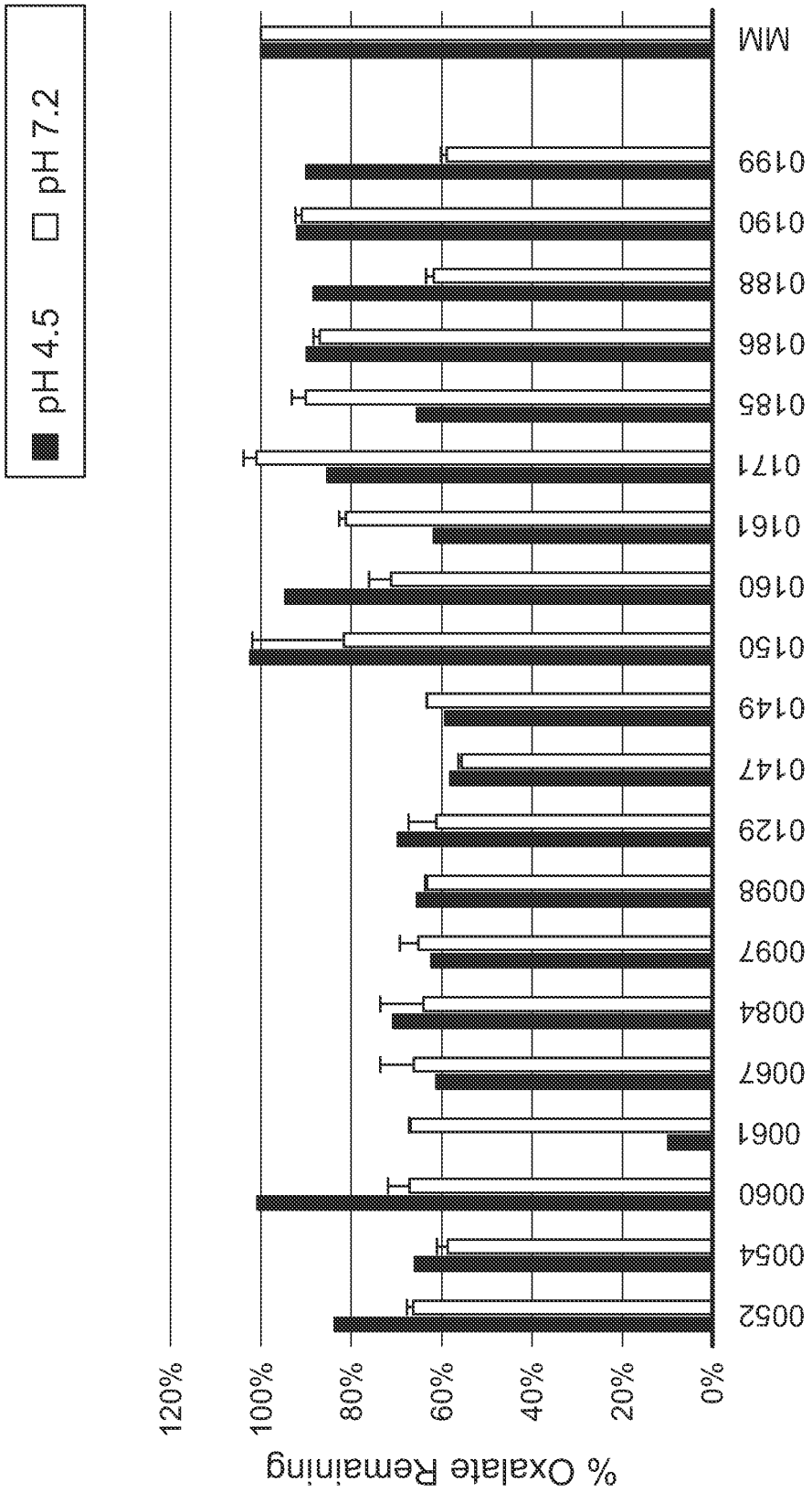

pH 4.5
pH 7.2
% Oxalate Remaining
120%
100%
80%
60%
40%
20%
0%
MM
0199
0190
0188
0186
0185
0171
0161
0160
0150
0149
0147
0129
0098
0097
0084
0067
0061
0060
0054
0052

FIG. 3A

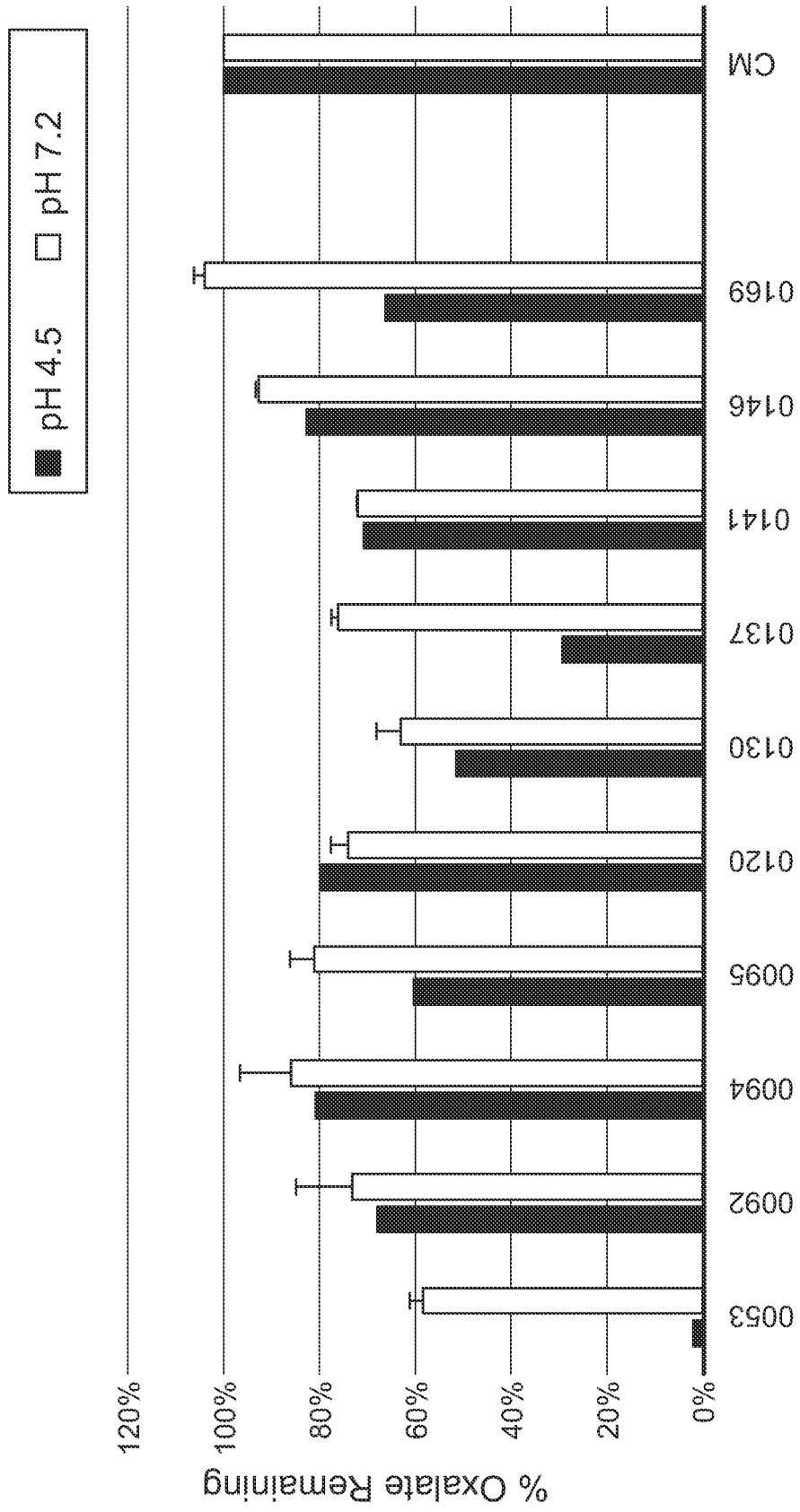

pH 4.5
pH 7.2
CM
0169
0146
0141
0137
0130
0120
0095
0094
0092
0053
120%
100%
80%
60%
40%
20%
0%
% Oxalate Remaining

FIG. 3B

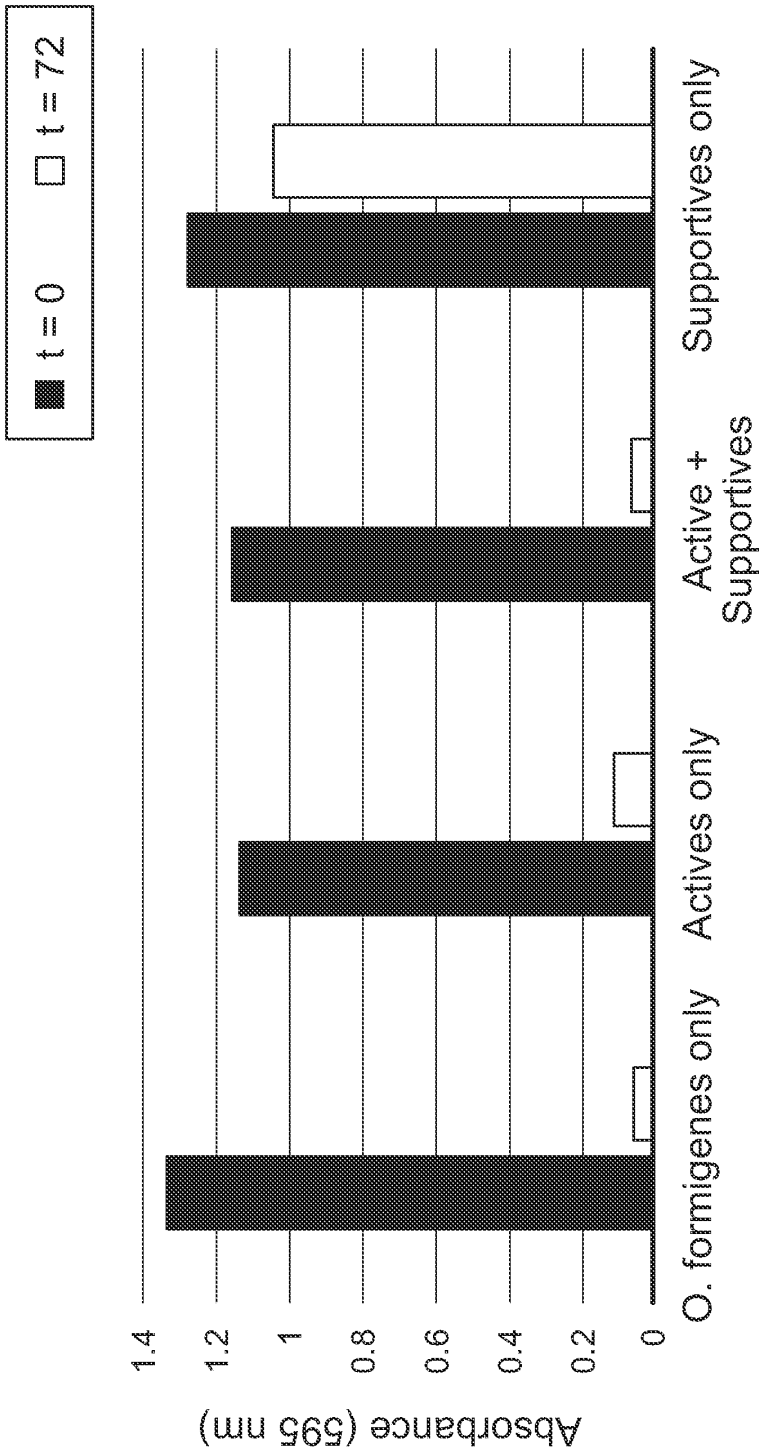

t = 0
t = 72
Absorbance (595 nm)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
O. formigenes only
Actives only
Active + Supportives
Supportives only

FIG. 4A

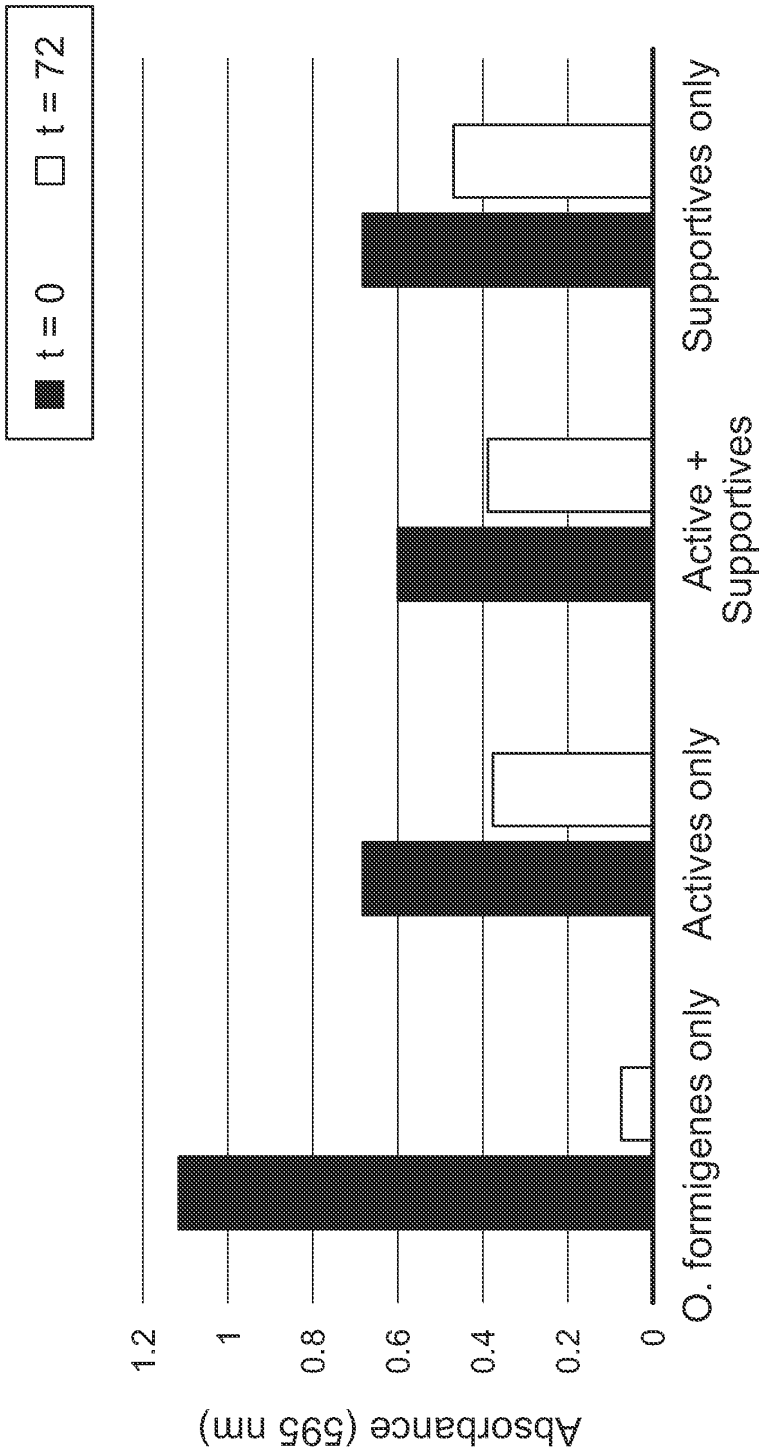

t = 0
t = 72
Absorbance (595 nm)
1.2
1
0.8
0.6
0.4
0.2
0
O. formigenes only
Actives only
Active + Supportives
Supportives only

FIG. 4B

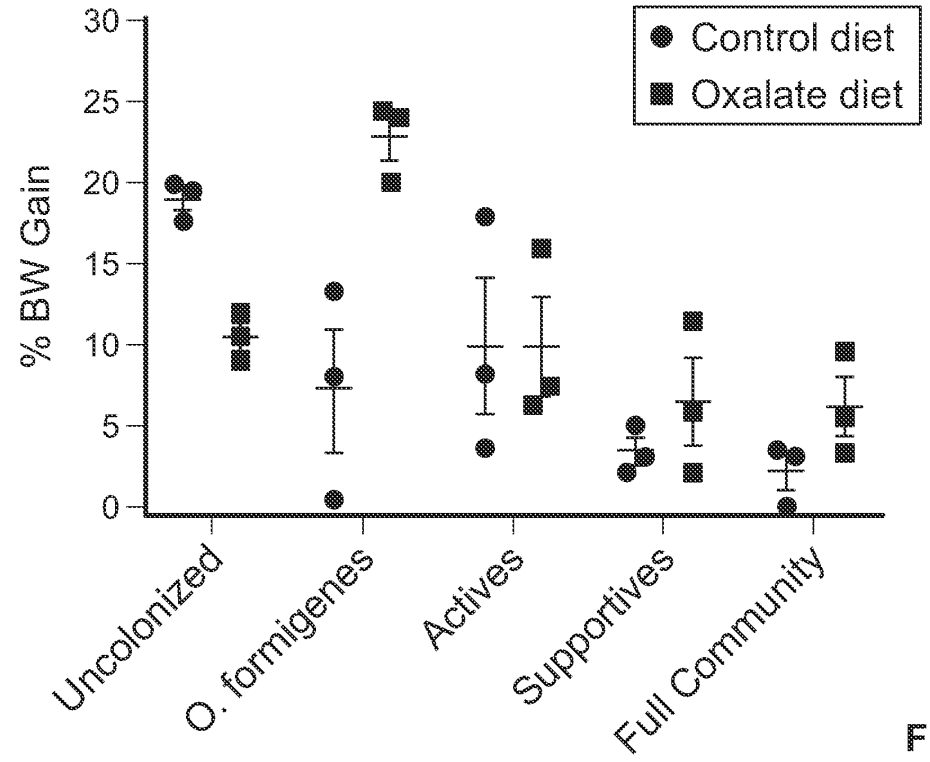

Control diet
Oxalate diet
% BW Gain
30
25
20
15
10
5
0
Uncolonized
O. formigenes
Actives
Supportives
Full Community

FIG. 5A

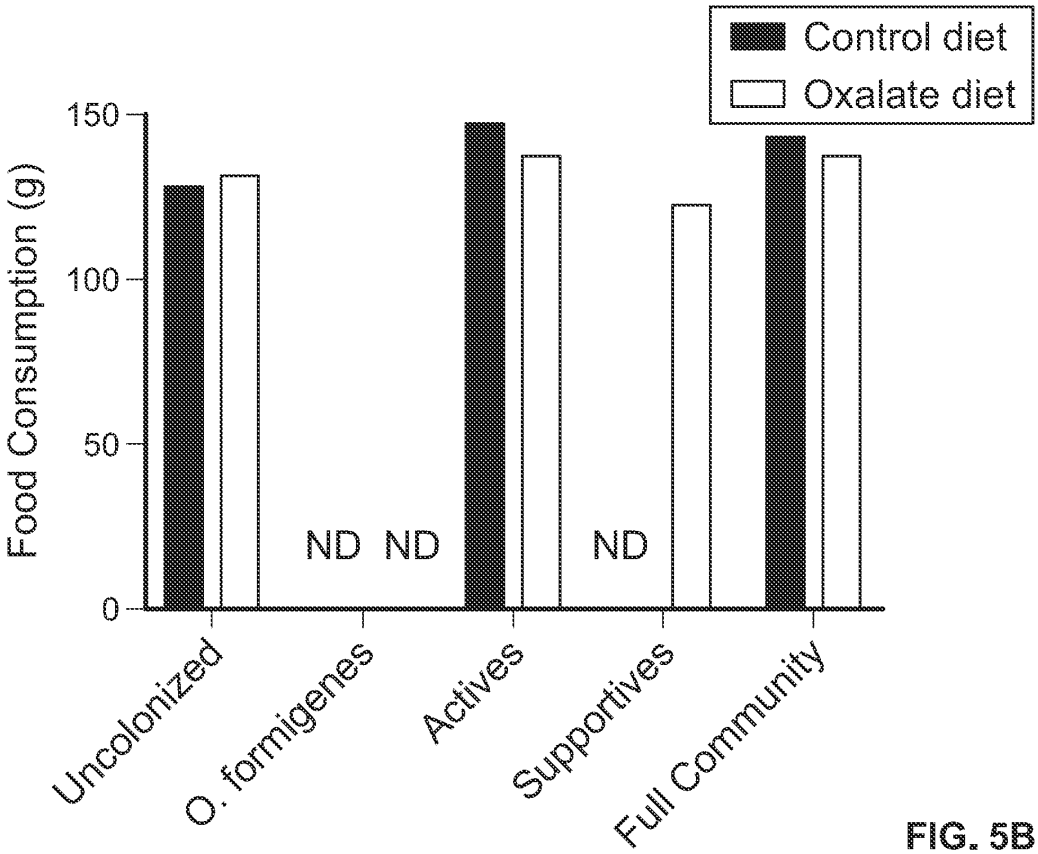

Control diet
Oxalate diet
Food Consumption (g)
150
100
50
0
ND ND
ND
Uncolonized
O. formigenes
Actives
Supportives
Full Community

FIG. 5B

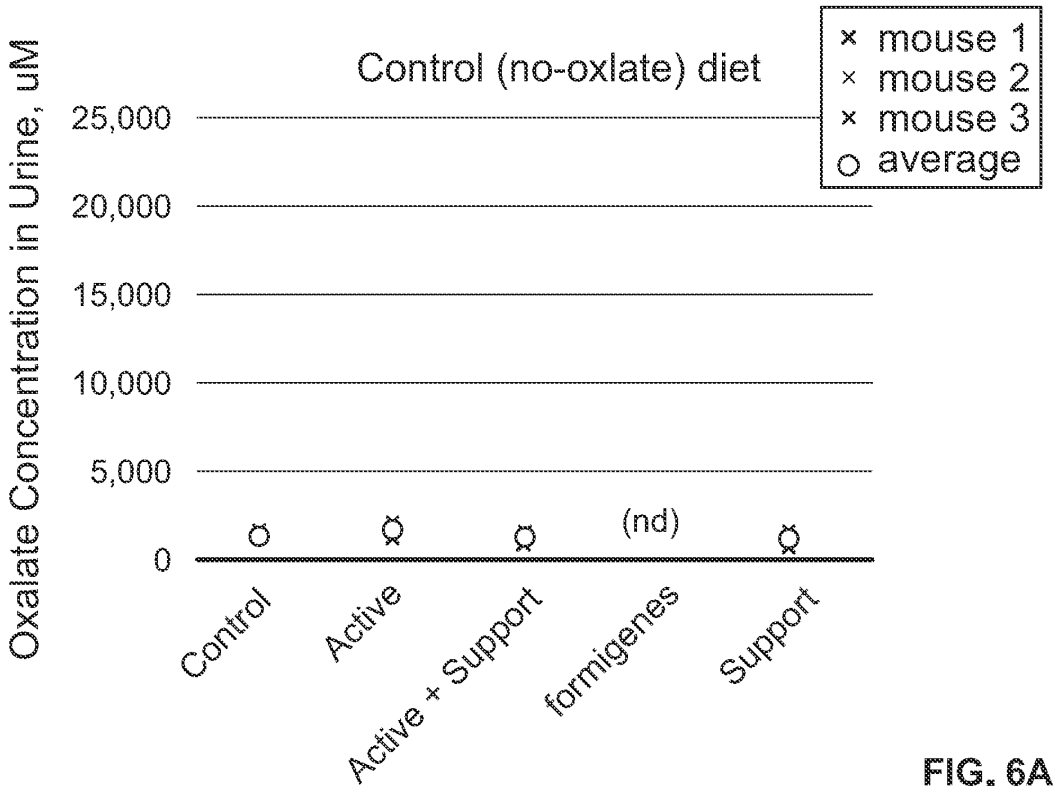

Control (no-oxlate) diet
mouse 1
mouse 2
mouse 3
average
Oxalate Concentration in Urine, uM
25,000
20,000
15,000
10,000
5,000
0
(nd)
Control
Active
Active + Support
formigenes
Support

FIG. 6A


Oxlate-supplemented diet
Oxalate Concentration in Urine, uM
25,000
20,000
15,000
10,000
5,000
0
Control
Active
Active + Support
formigenes
Support

FIG. 6B

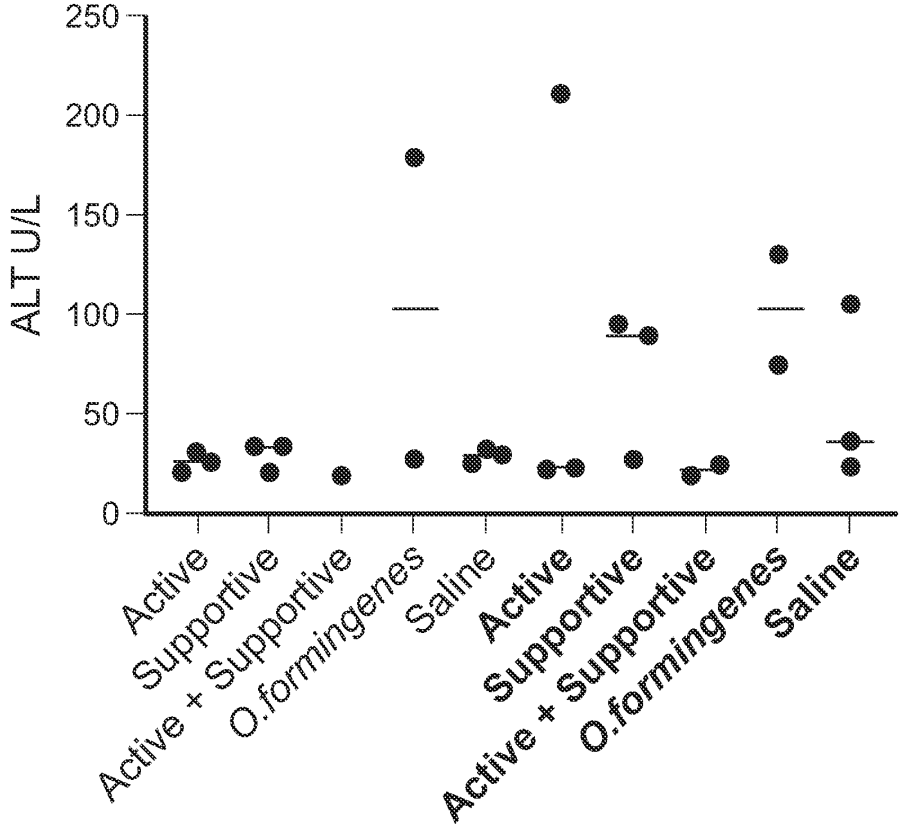

ALT U/L
250
200
150
100
50
0
Active
Supportive
Active + Supportive
O.formingenes
Saline
Active
Supportive
Active + Supportive
O.formingenes
Saline

FIG. 7A

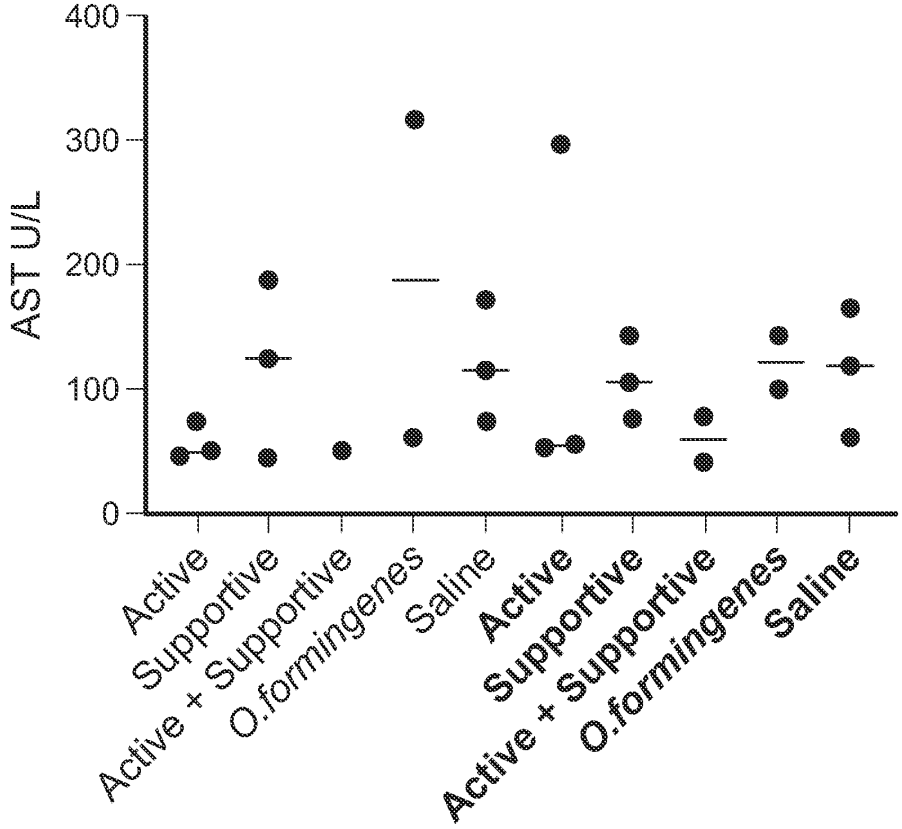

AST U/L
400
300
200
100
0
Active
Supportive
Active + Supportive
O.formingenes
Saline
Active
Supportive
Active + Supportive
O.formingenes
Saline

FIG. 7B

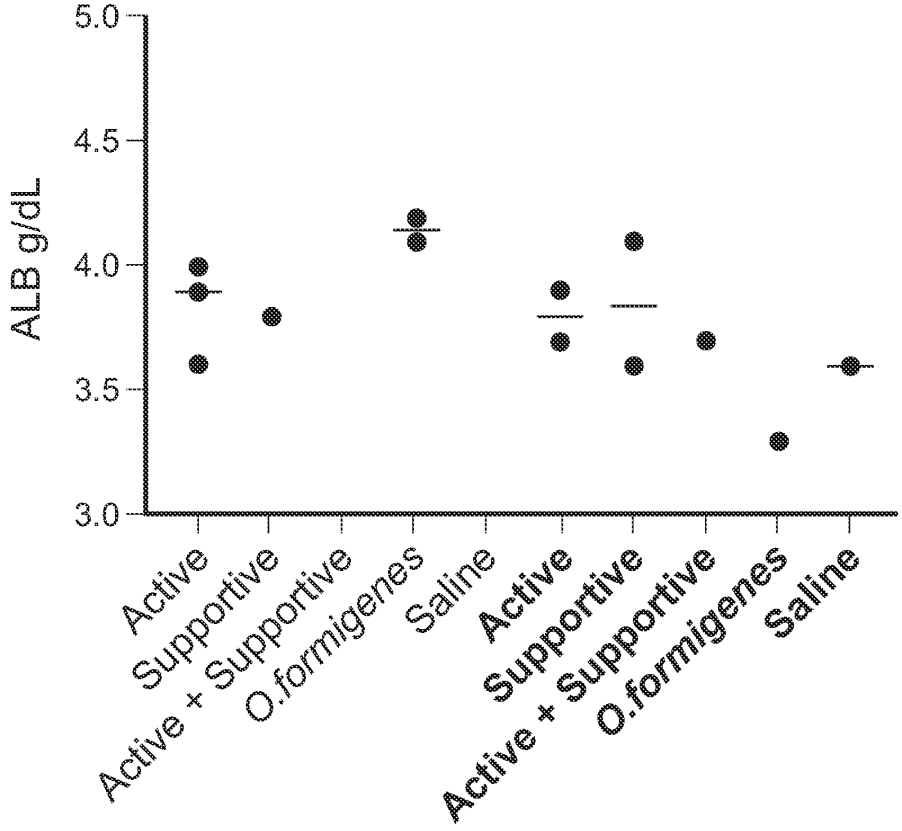

ALB g/dL
5.0
4.5
4.0
3.5
3.0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 7C

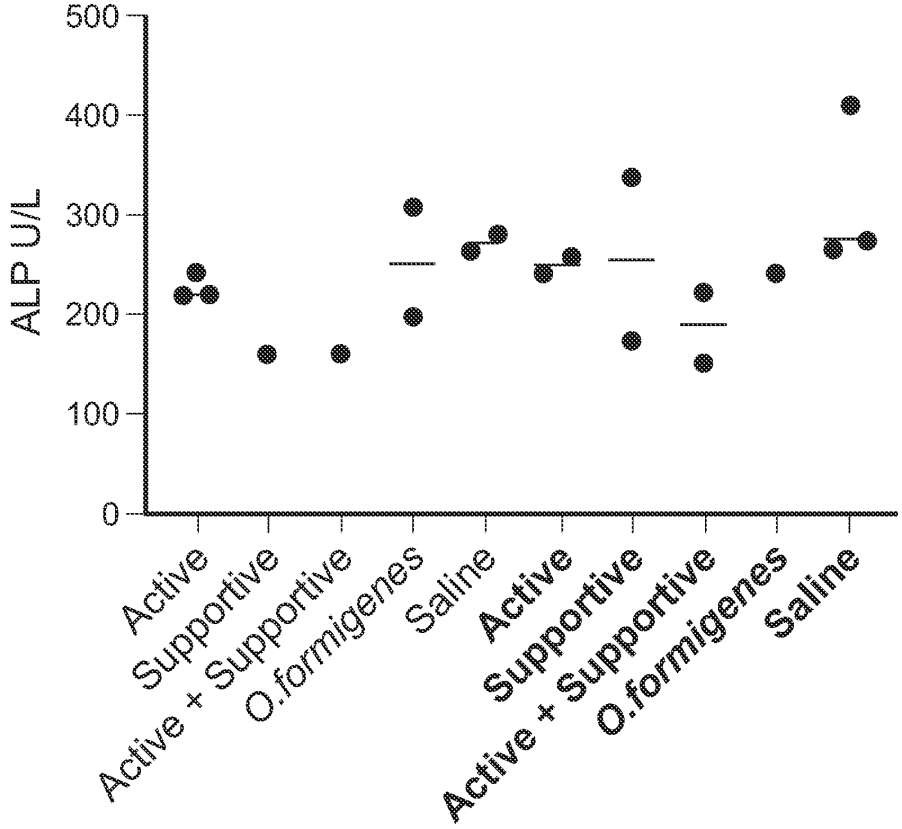

ALP U/L
500
400
300
200
100
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 7D

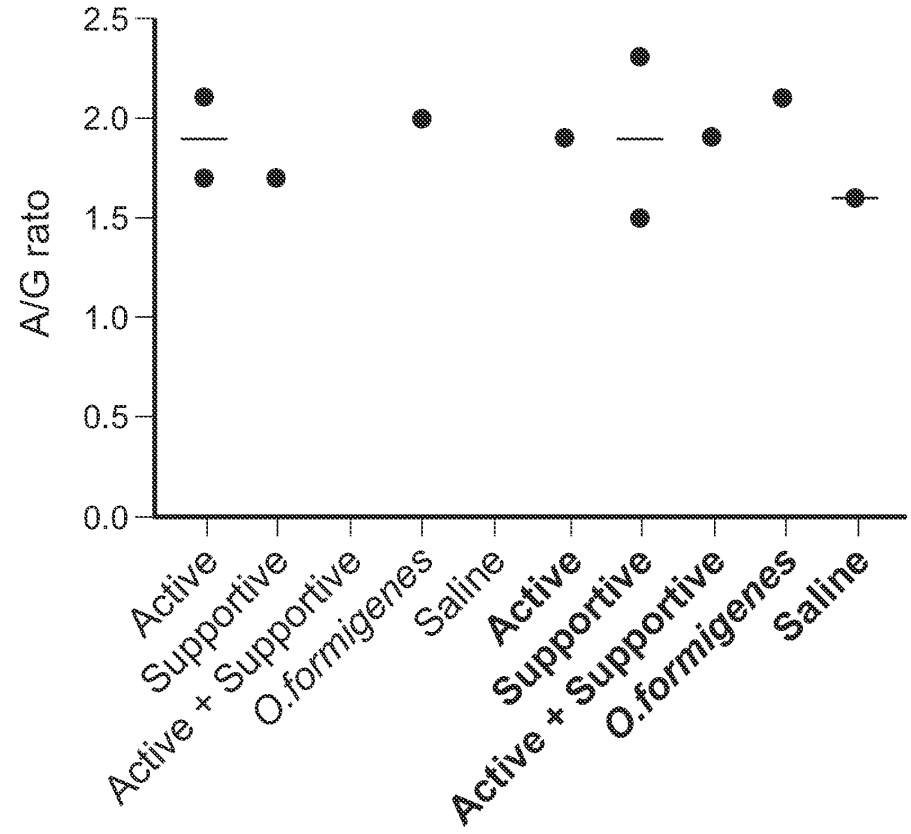

A/G rato
2.5
2.0
1.5
1.0
0.5
0.0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 7E

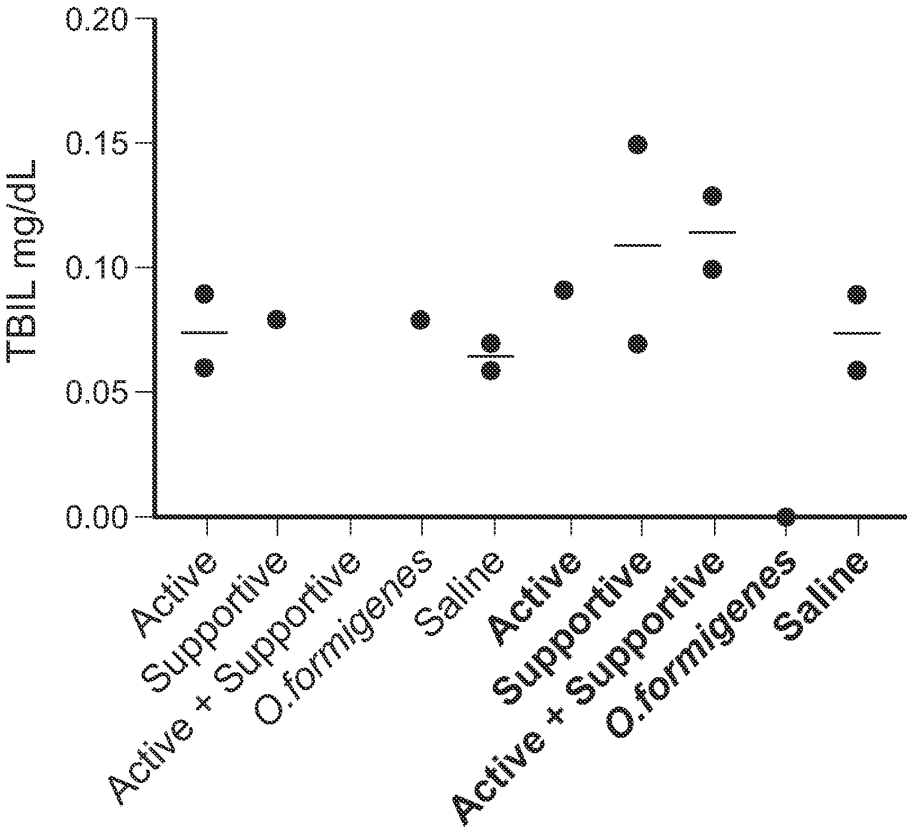

TBIL mg/dL
0.20
0.15
0.10
0.05
0.00
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 7F

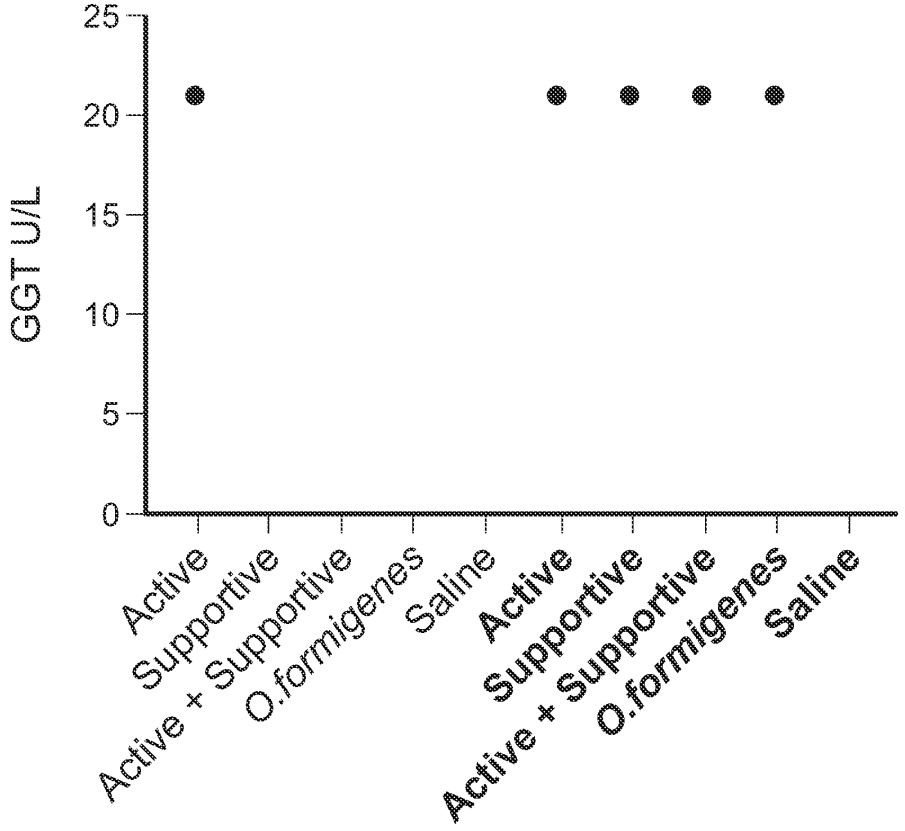

GGT U/L
25
20
15
10
5
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 7G

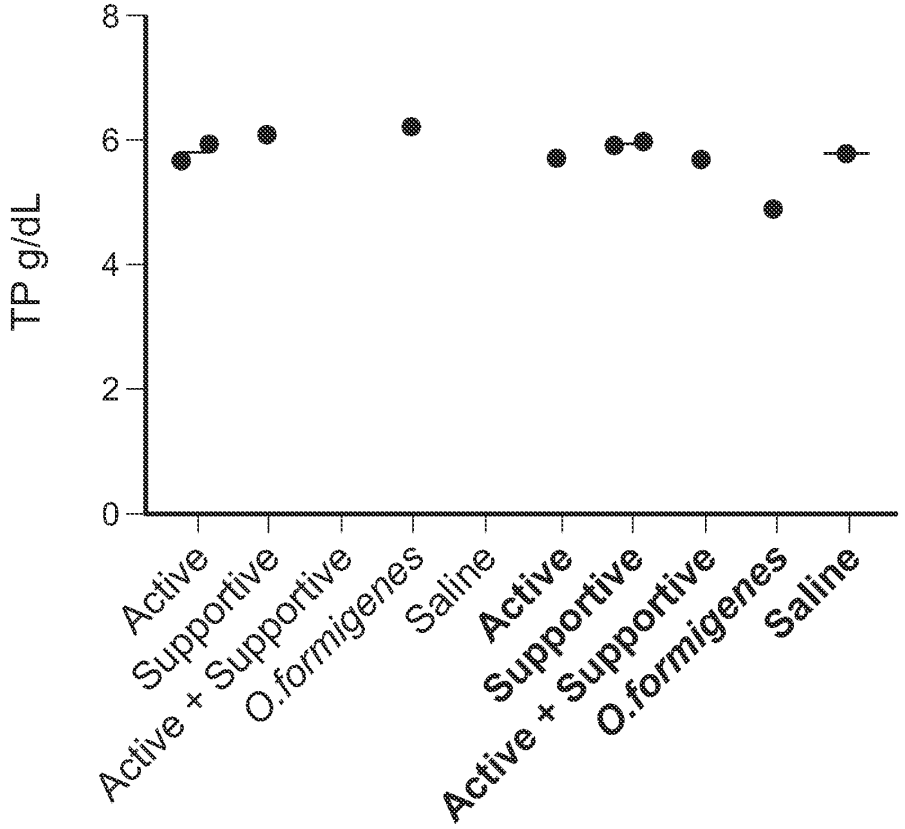

TP g/dL
8
6
4
2
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 7H

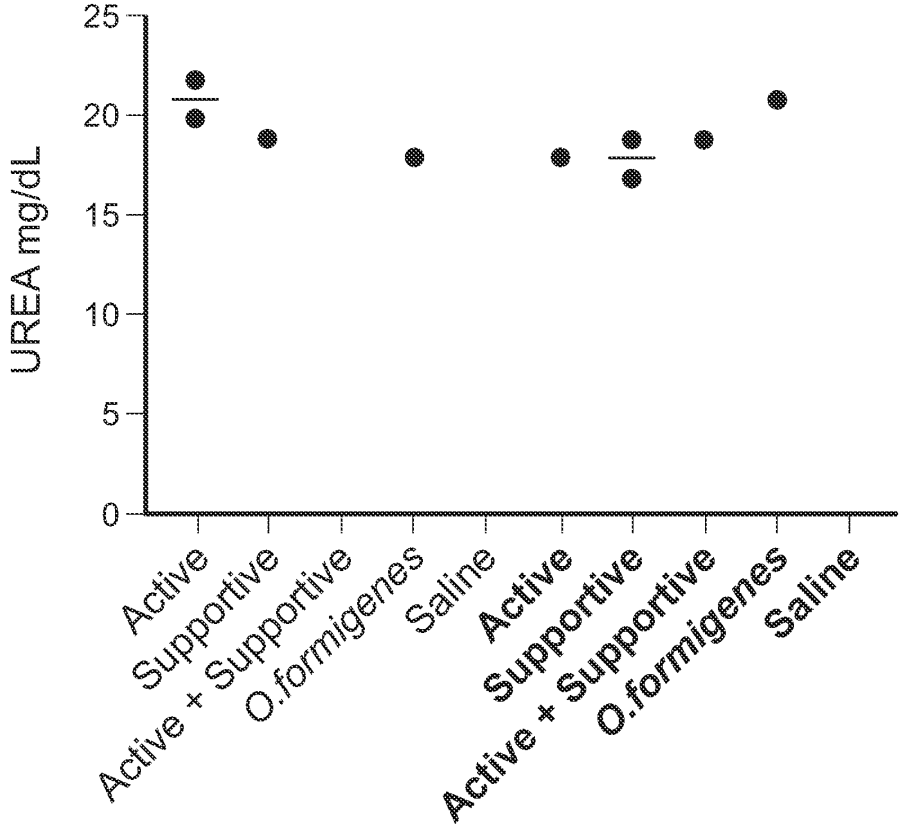

UREA mg/dL
25
20
15
10
5
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 8A

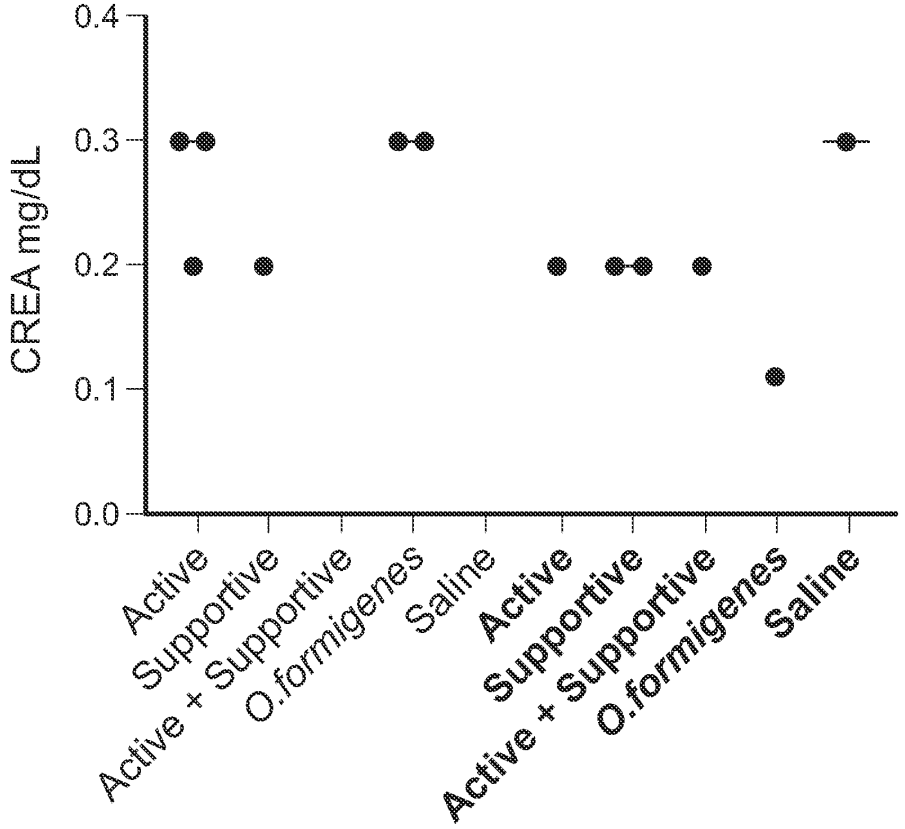

CREA mg/dL
0.4
0.3
0.2
0.1
0.0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 8B

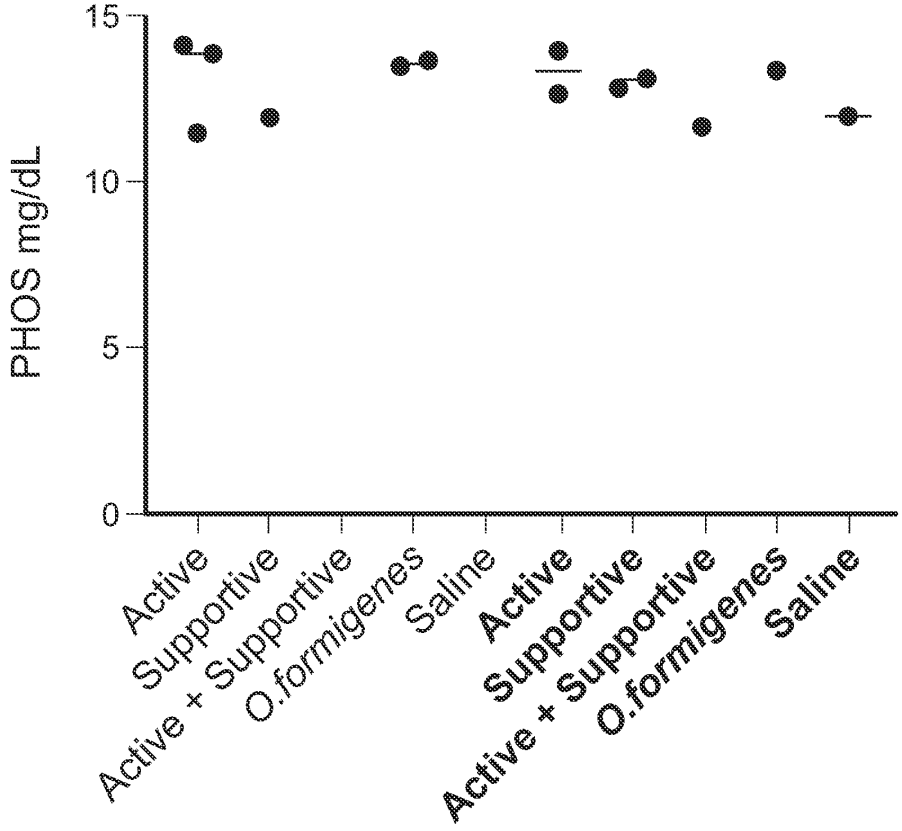

PHOS mg/dL
15
10
5
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 8C

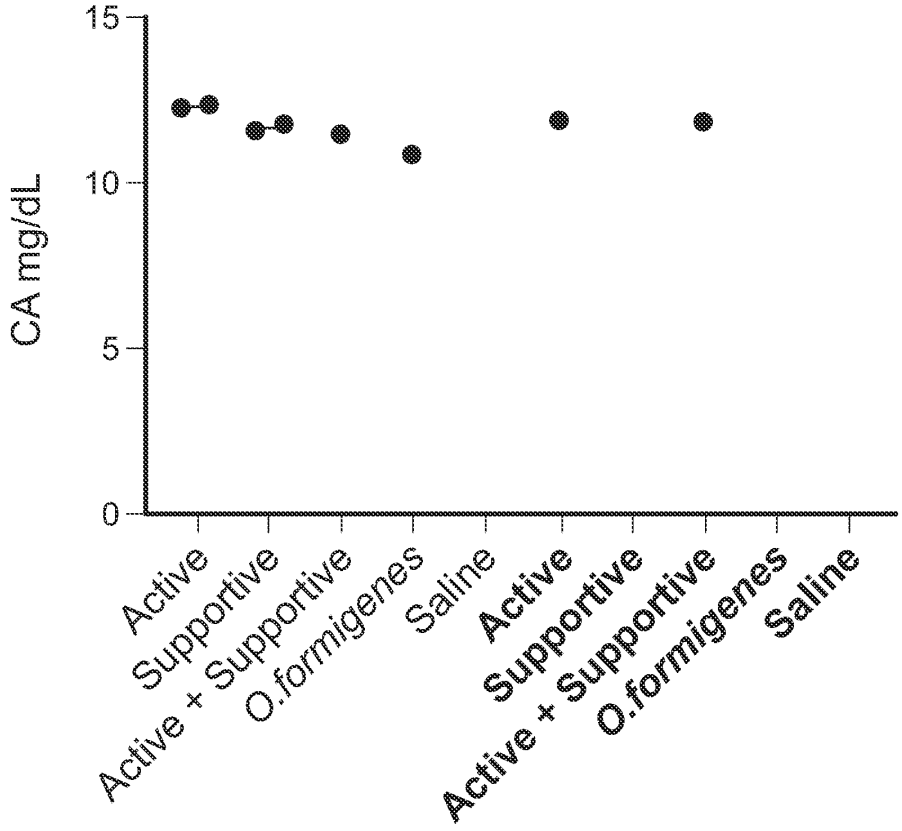

CA mg/dL
15
10
5
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 8D

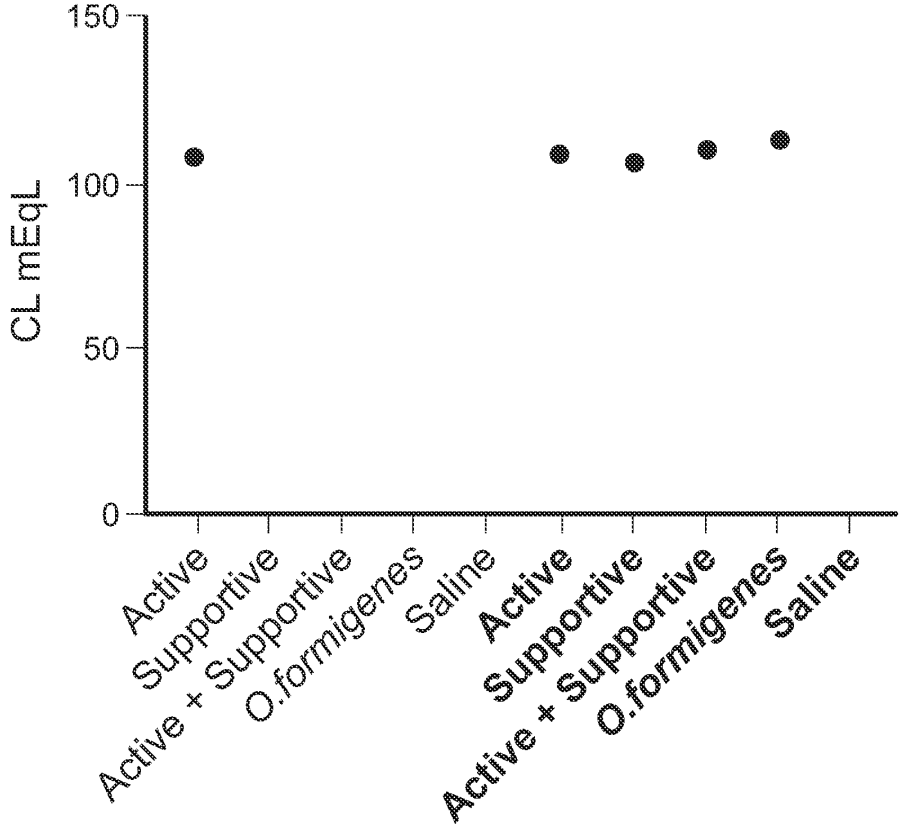

CL mEqL
150
100
50
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 8E

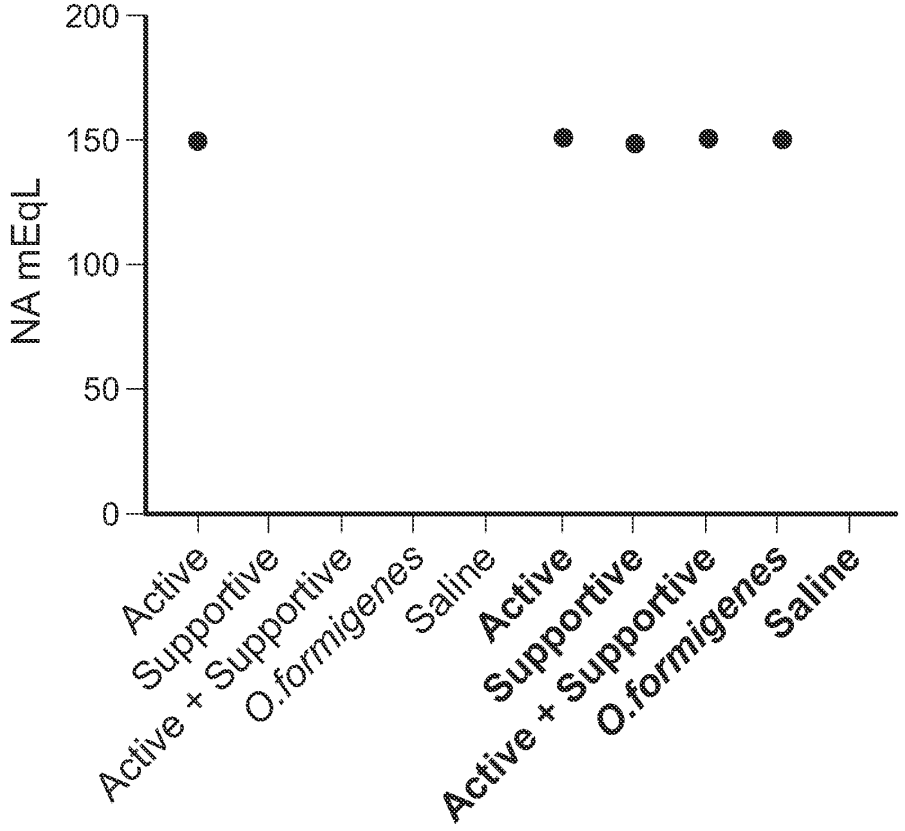

NA mEqL
200
150
100
50
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 8F

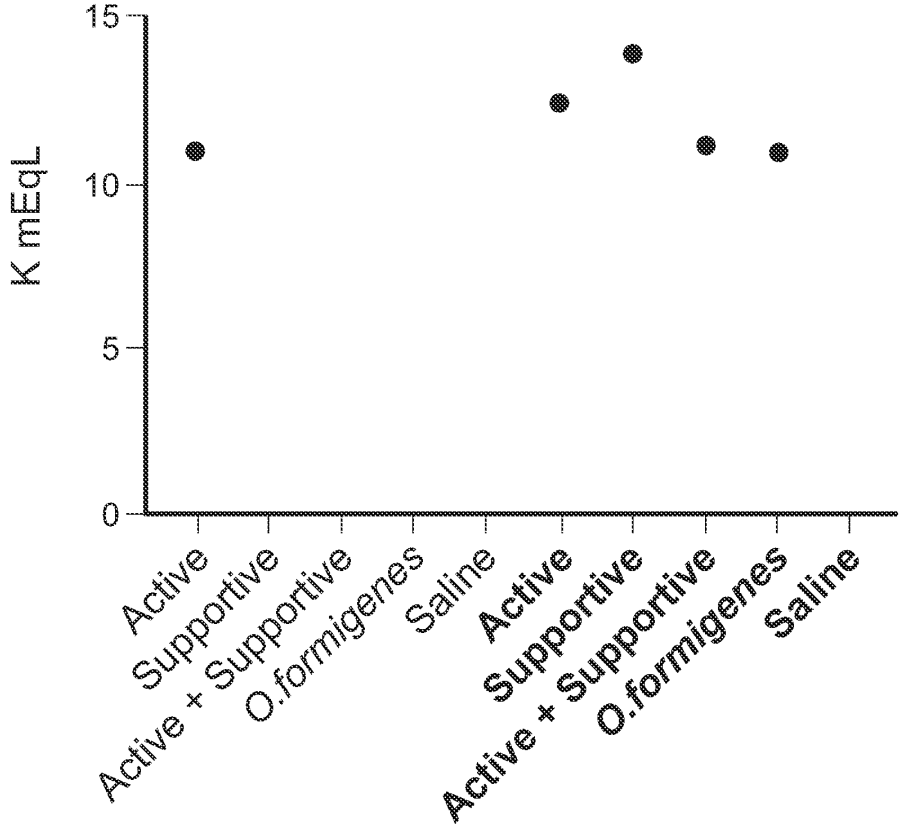

K mEqL
15
10
5
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 8G

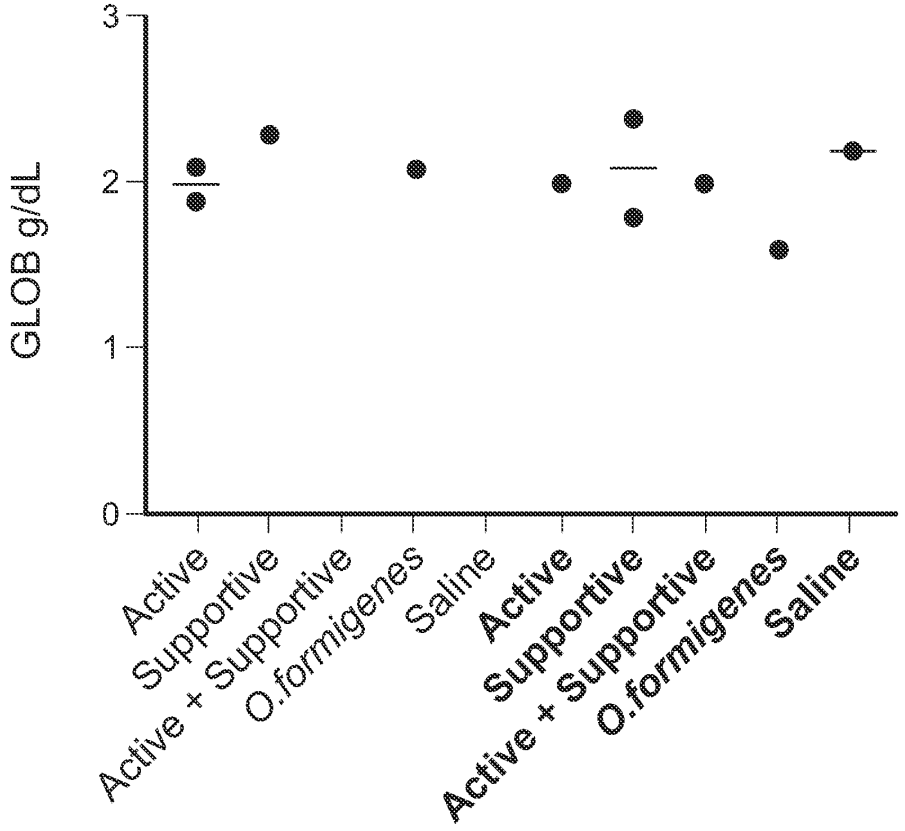

GLOB g/dL
3
2
1
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 8H

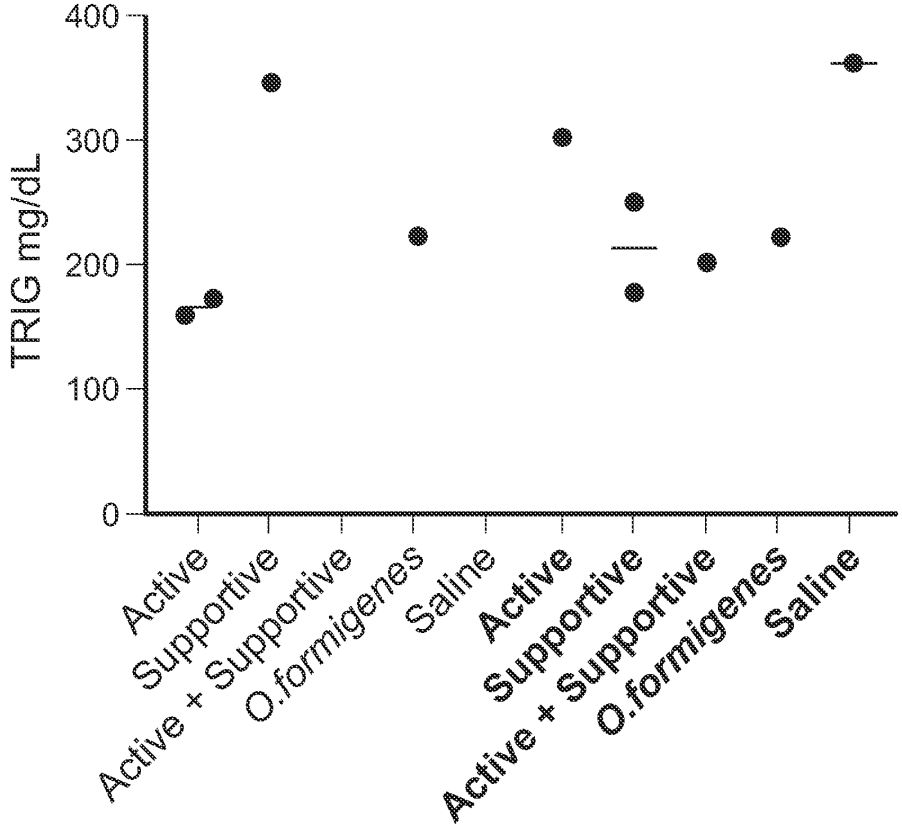

TRIG mg/dL
400
300
200
100
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 9A

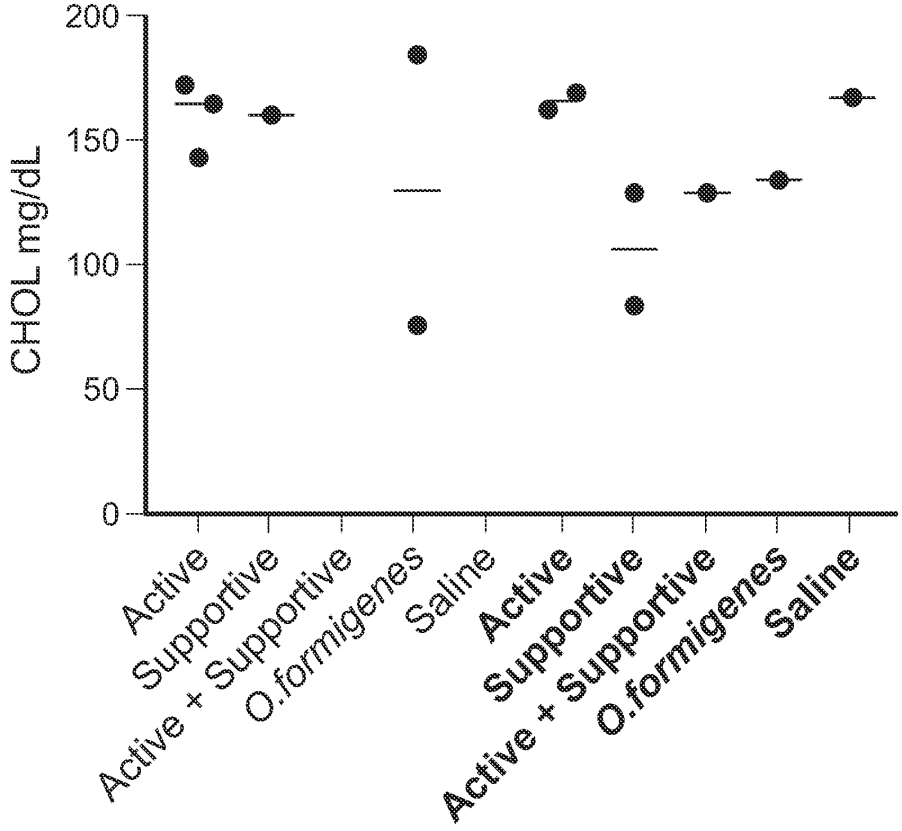

CHOL mg/dL
200
150
100
50
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 9B

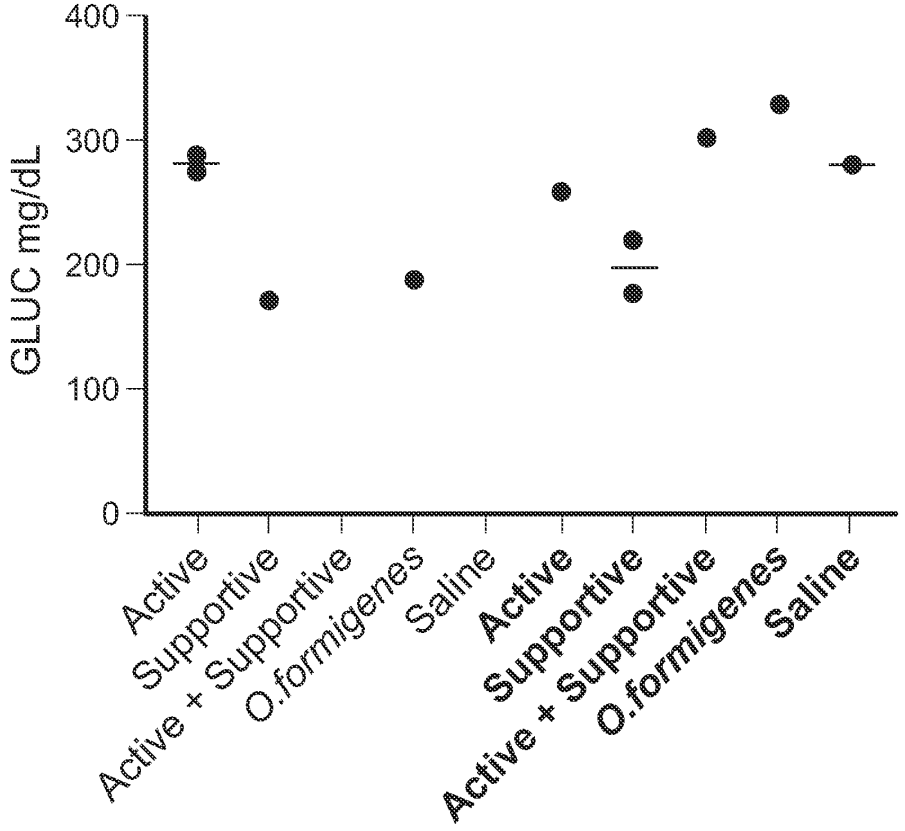

GLUC mg/dL
400
300
200
100
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 9C

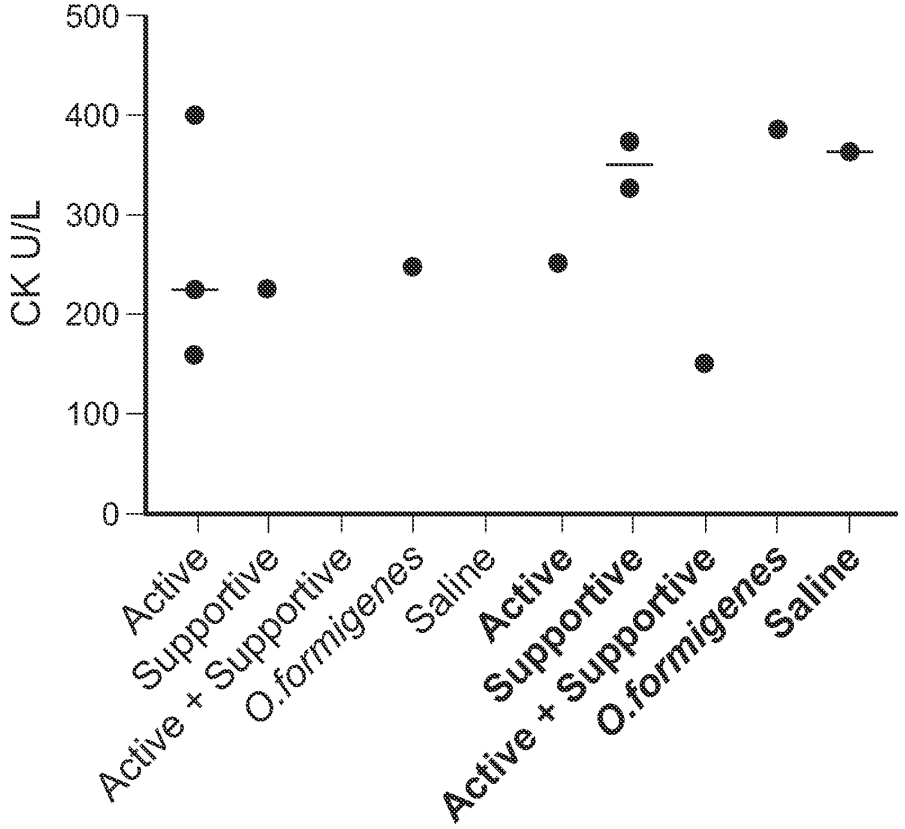

CK U/L
500
400
300
200
100
0
Active
Supportive
Active + Supportive
O.formigenes
Saline
Active
Supportive
Active + Supportive
O.formigenes
Saline

FIG. 9D

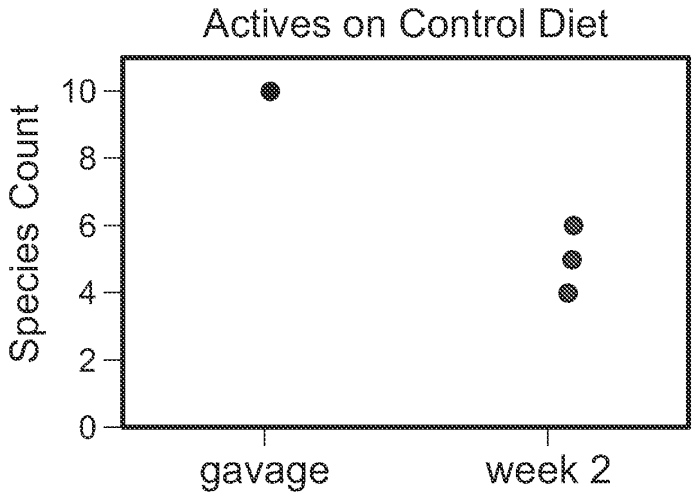


FIG. 10A

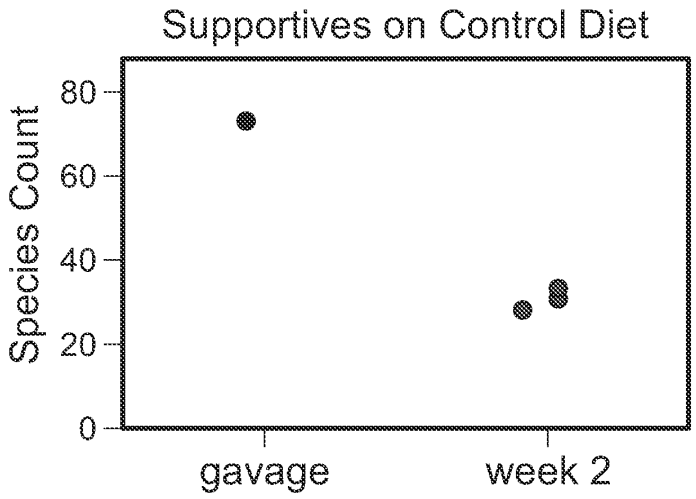


FIG. 10B

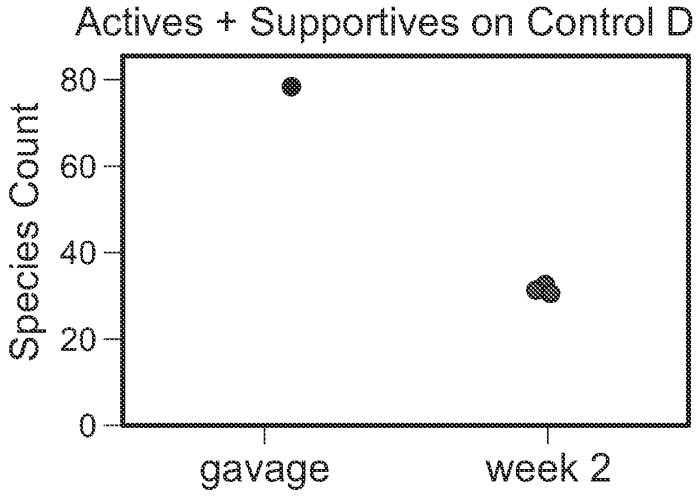


FIG. 10C

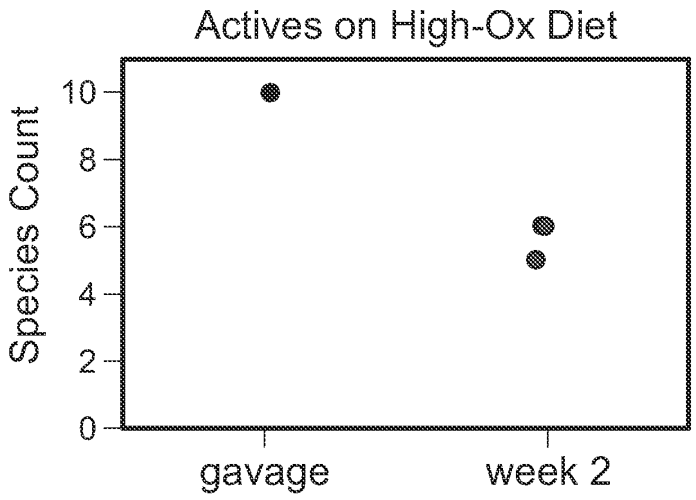


FIG. 10D

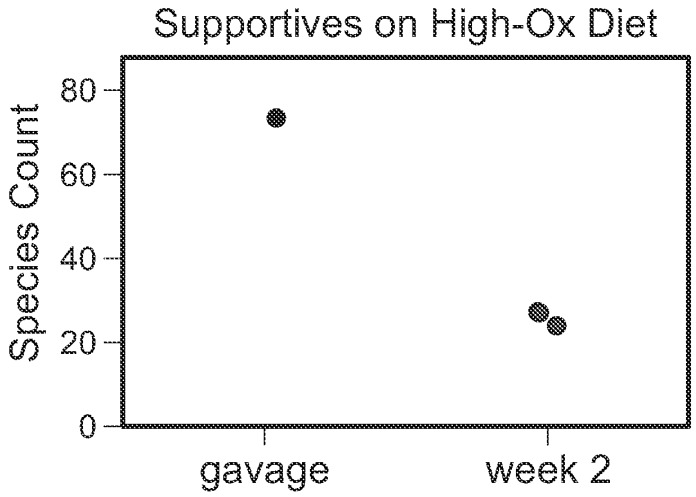


FIG. 10E

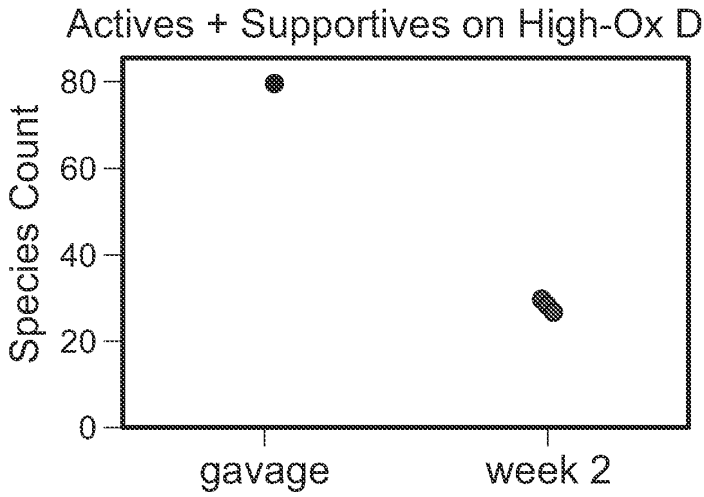


FIG. 10F

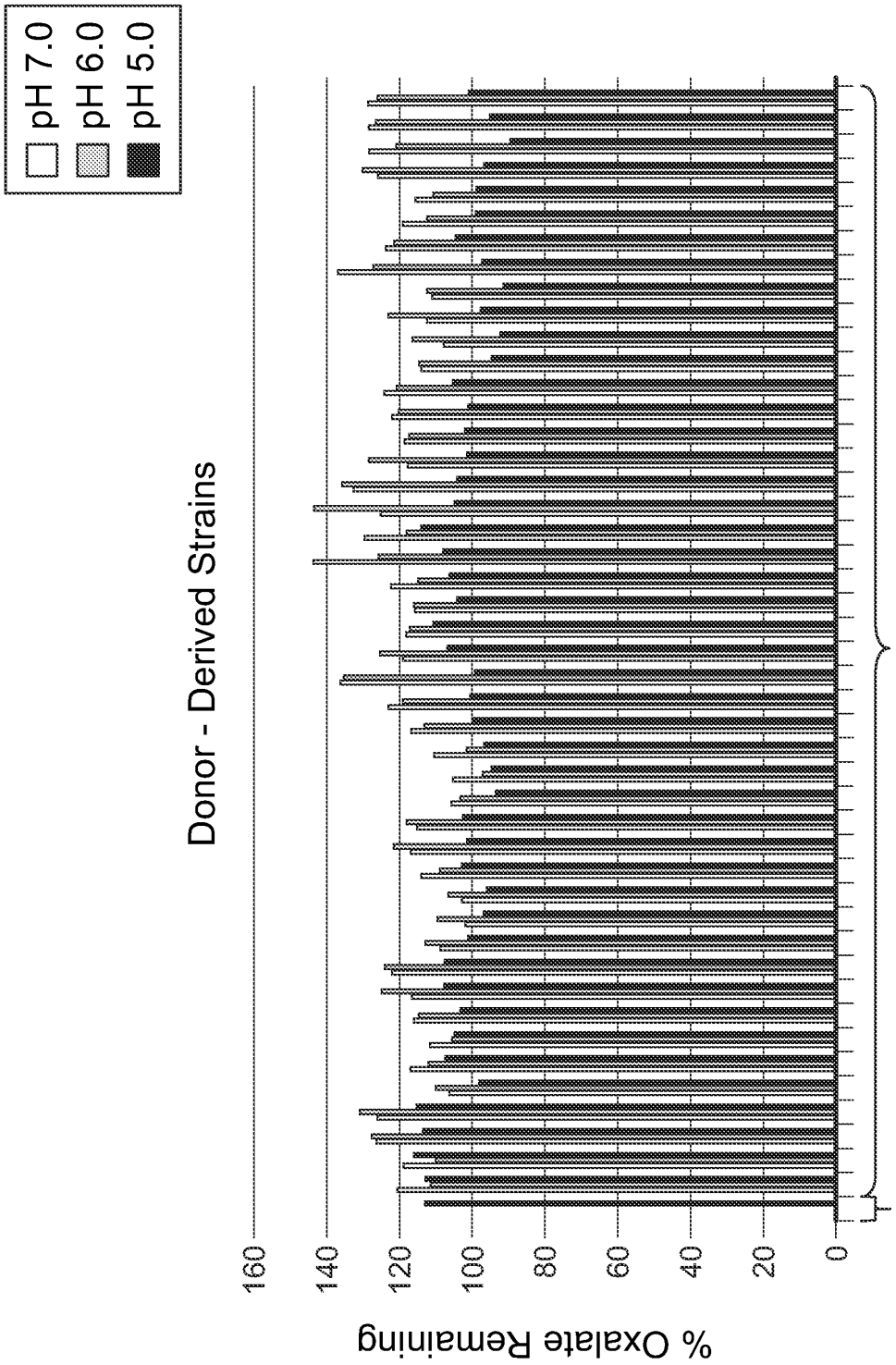

pH 7.0
pH 6.0
pH 5.0
Donor - Derived Strains
% Oxalate Remaining
160
140
120
100
80
60
40
20
0
O. formigenes
non O. formigenes

FIG. 11

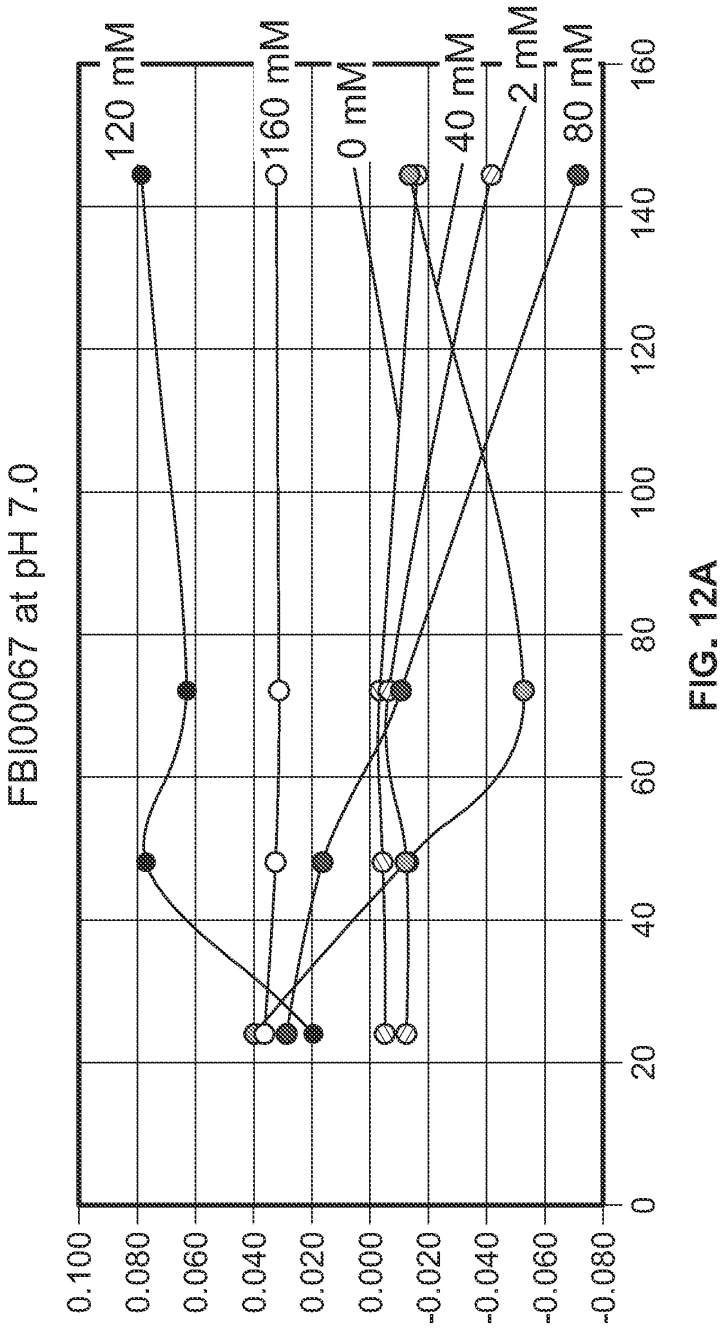

FB100067 at pH 7.0
120 mM
160 mM
0 mM
40 mM
2 mM
80 mM
0.100
0.080
0.060
0.040
0.020
0.000
-0.020
-0.040
-0.060
-0.080
0
20
40
60
80
100
120
140
160

FIG. 12A

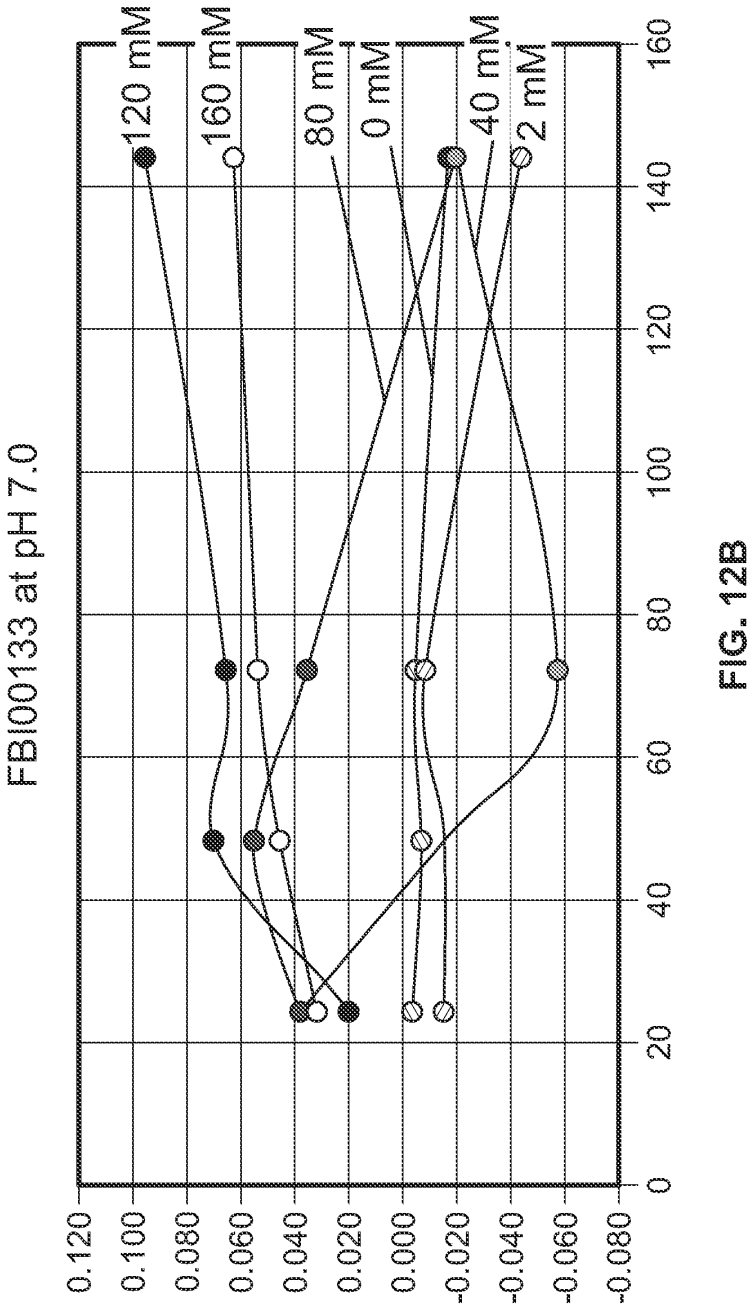

FBI00133 at pH 7.0
120 mM
160 mM
80 mM
0 mM
40 mM
2 mM
0.120
0.100
0.080
0.060
0.040
0.020
0.000
-0.020
-0.040
-0.060
-0.080
0
20
40
60
80
100
120
140
160

FIG. 12B

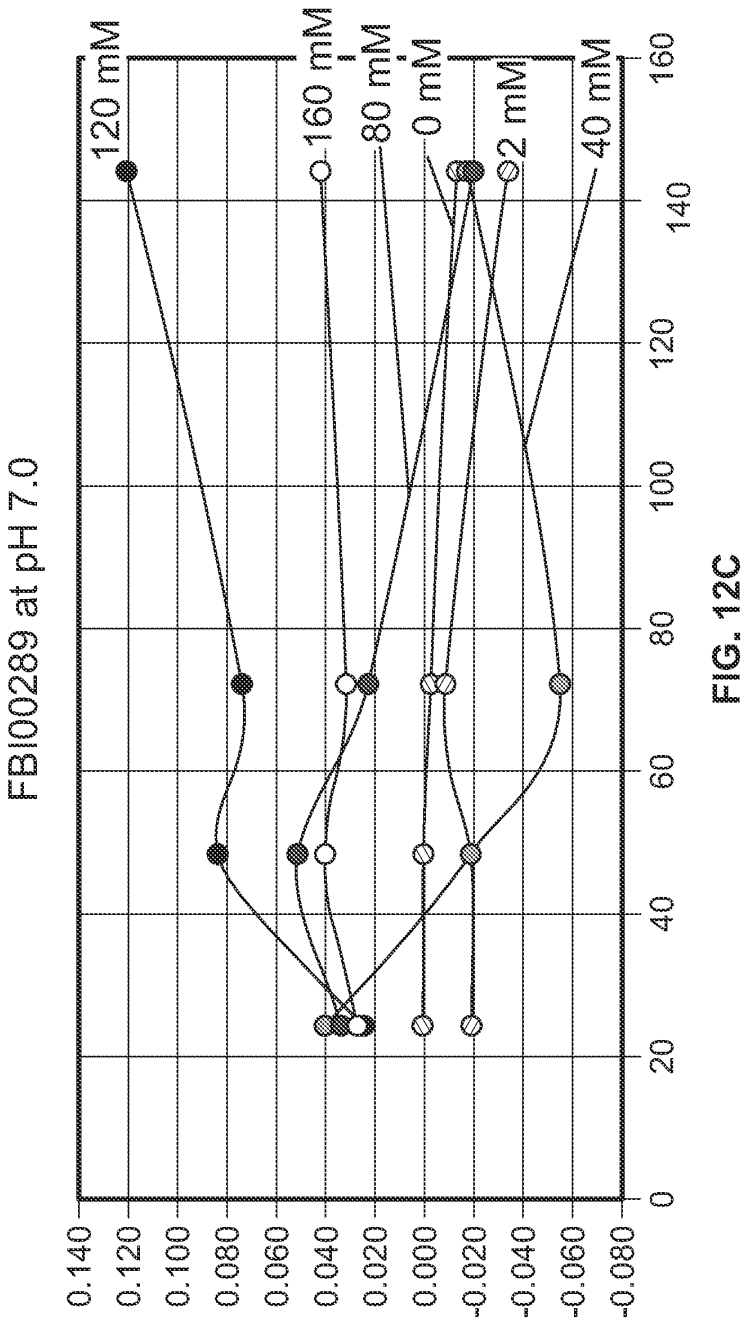

FBI00289 at pH 7.0
120 mM
160 mM
80 mM
0 mM
2 mM
40 mM
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
-0.020
-0.040
-0.060
-0.080
0
20
40
60
80
100
120
140
160

FIG. 12C

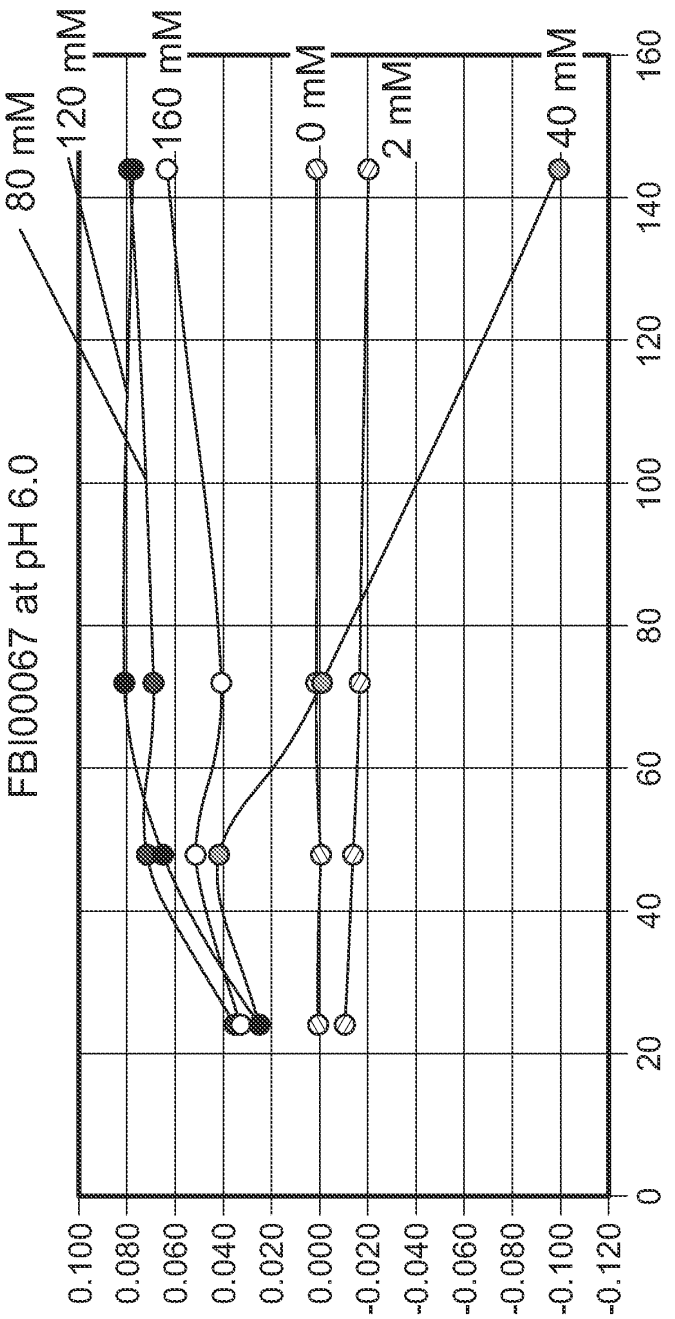

FB100067 at pH 6.0
80 mM
120 mM
160 mM
0 mM
2 mM
40 mM
0.100
0.080
0.060
0.040
0.020
0.000
-0.020
-0.040
-0.060
-0.080
-0.100
-0.120
0
20
40
60
80
100
120
140
160

FIG. 12D

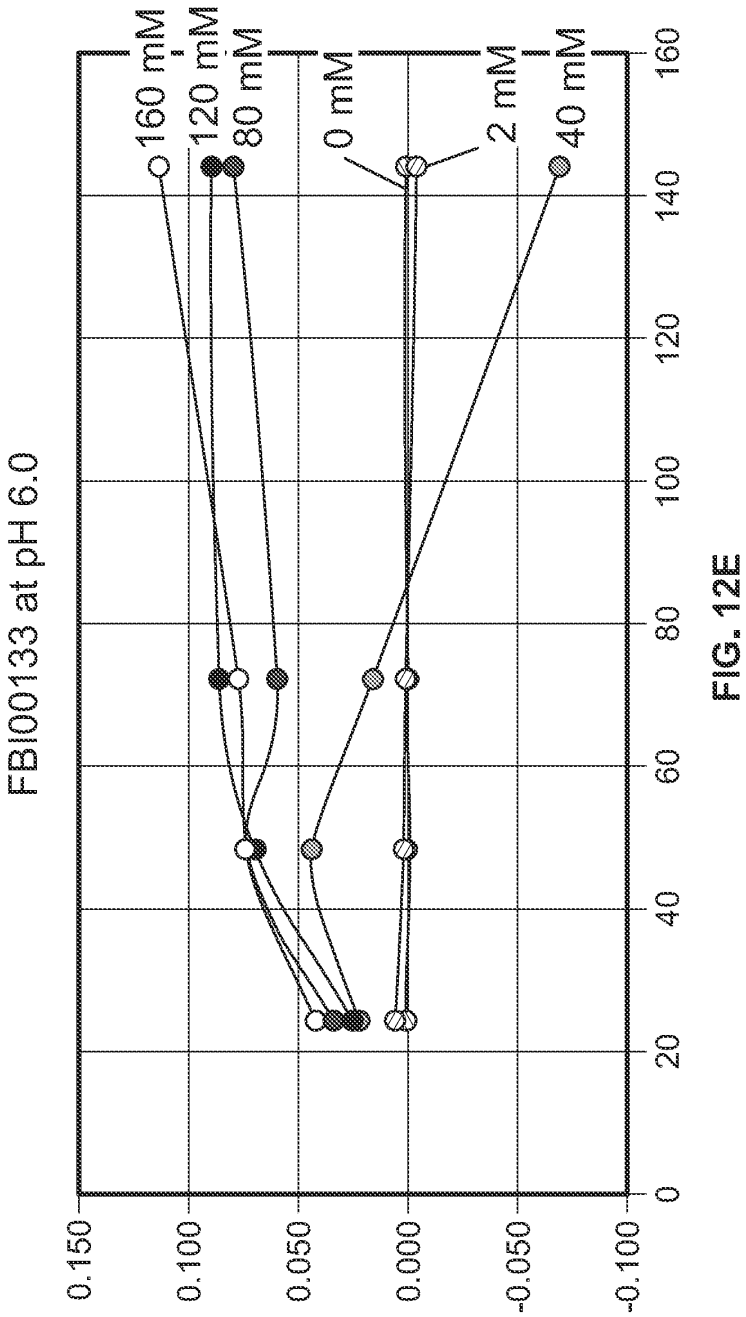

FBI00133 at pH 6.0
160 mM
120 mM
80 mM
0 mM
2 mM
40 mM
0.150
0.100
0.050
0.000
-0.050
-0.100
0
20
40
60
80
100
120
140
160

FIG. 12E

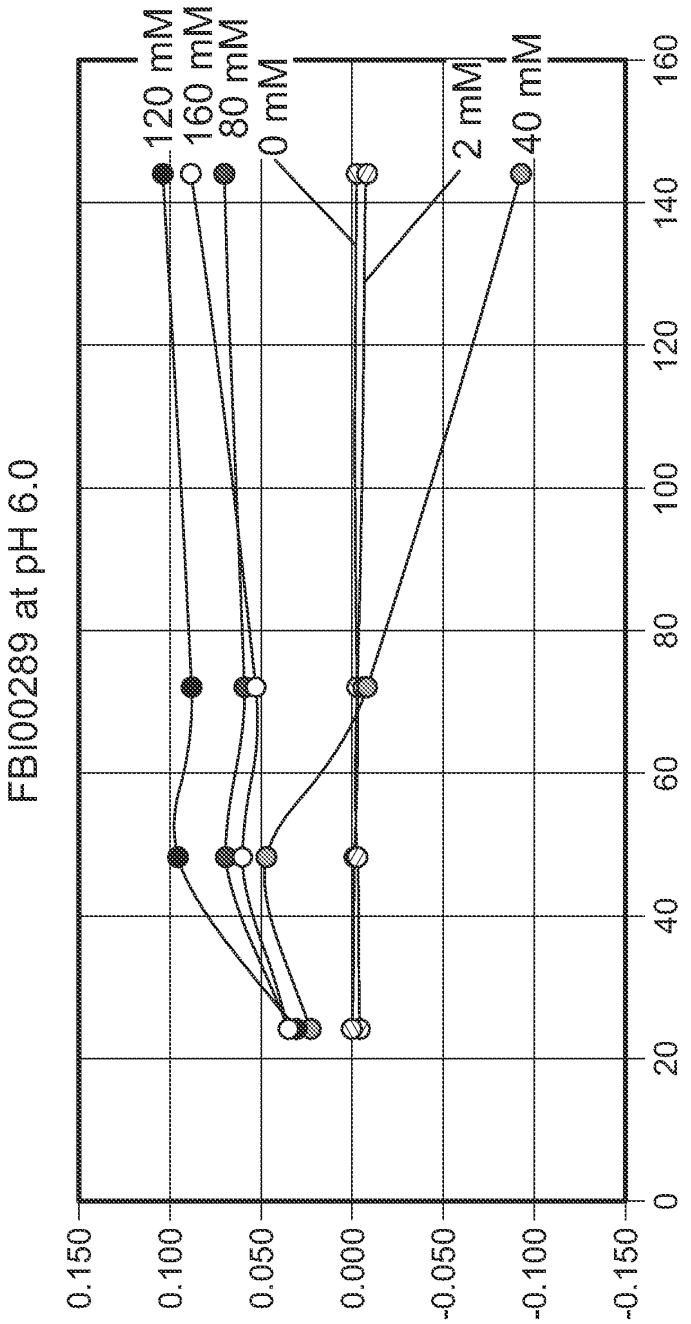

FBI00289 at pH 6.0
120 mM
160 mM
80 mM
0 mM
2 mM
40 mM
0.150
0.100
0.050
0.000
-0.050
-0.100
-0.150
0
20
40
60
80
100
120
140
160

FIG. 12F

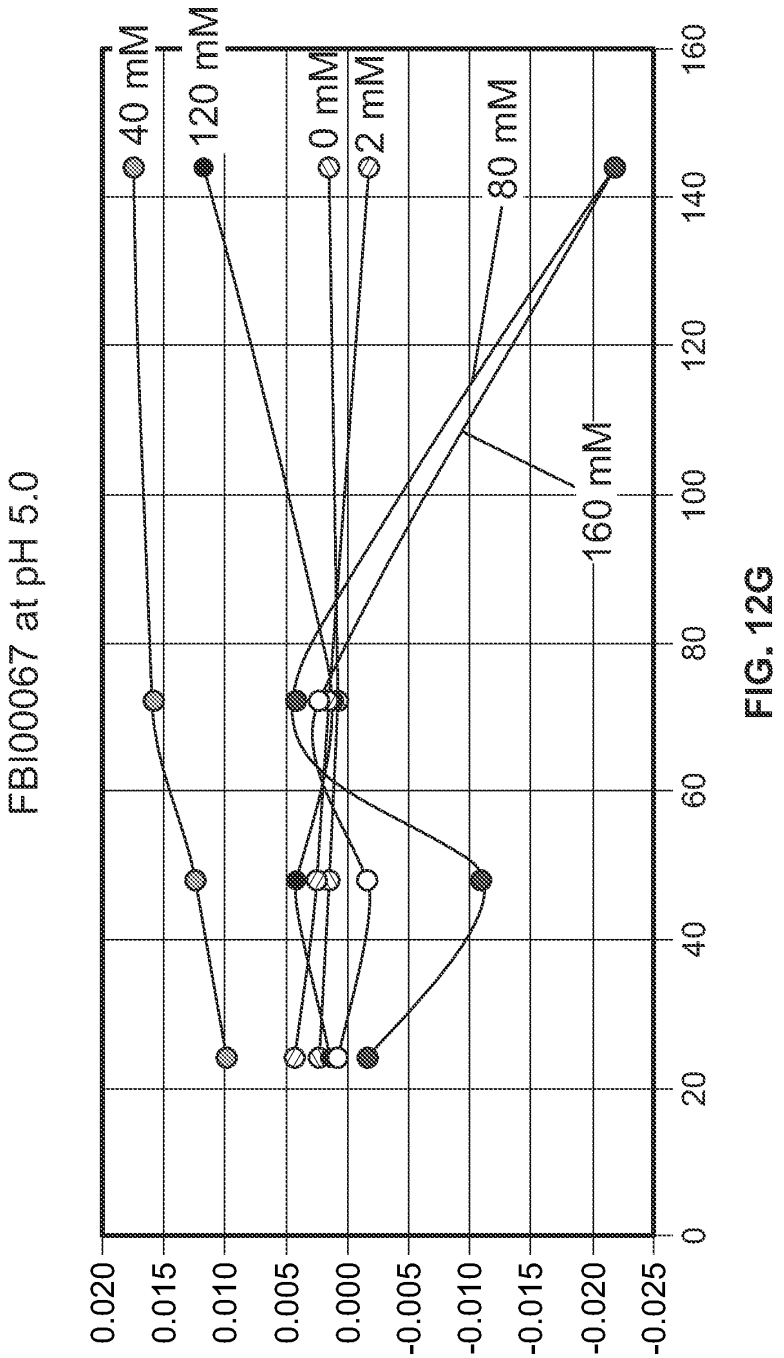

FBI00067 at pH 5.0
40 mM
120 mM
0 mM
2 mM
80 mM
160 mM
0.020
0.015
0.010
0.005
0.000
-0.005
-0.010
-0.015
-0.020
-0.025
0
20
40
60
80
100
120
140
160

FIG. 12G

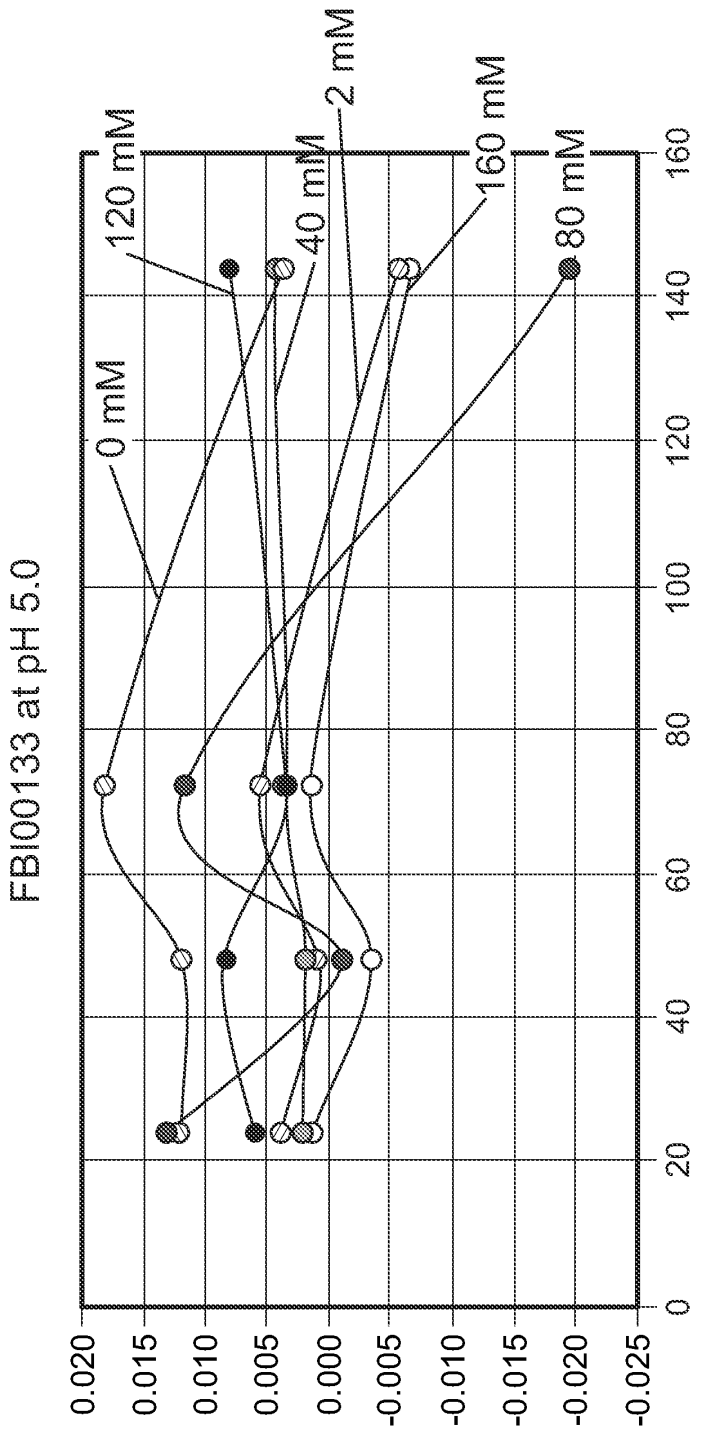

FBI00133 at pH 5.0
0 mM
120 mM
2 mM
40 mM
160 mM
80 mM
0.020
0.015
0.010
0.005
0.000
-0.005
-0.010
-0.015
-0.020
-0.025
0
20
40
60
80
100
120
140
160

FIG. 12H

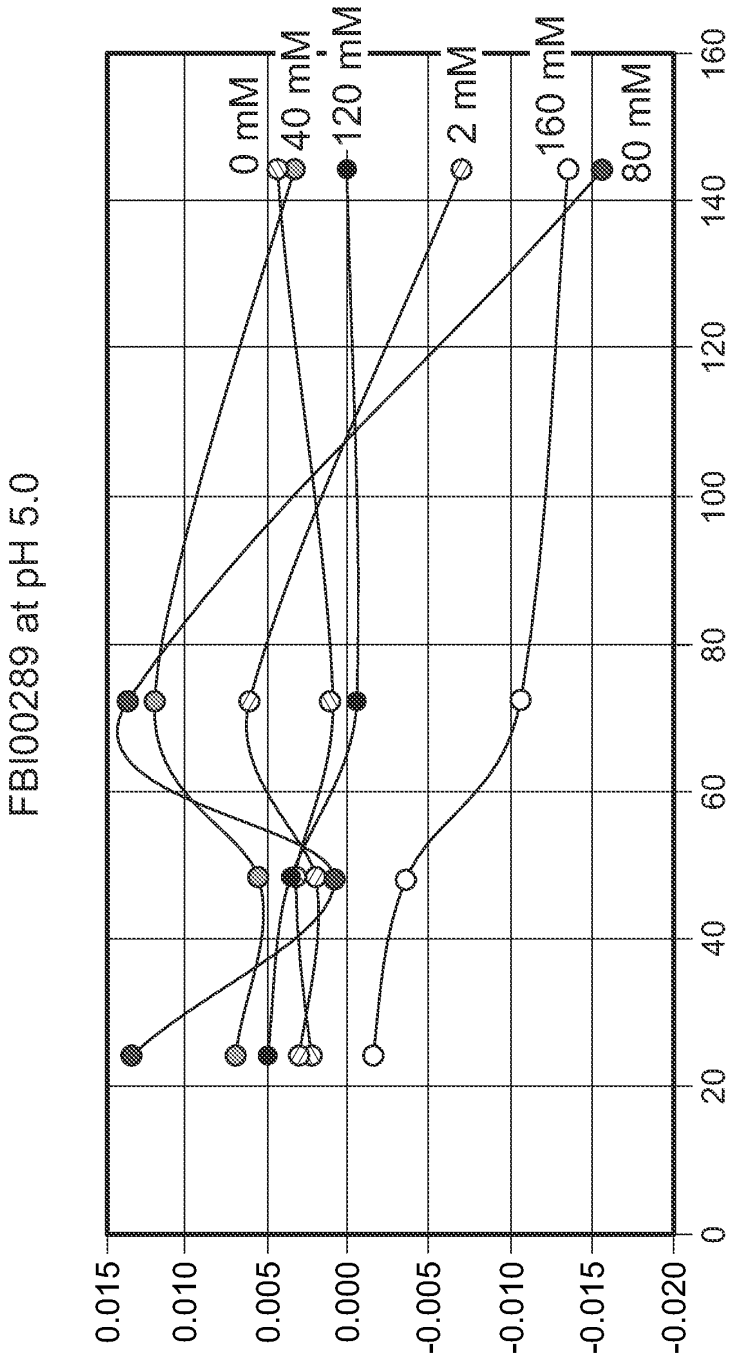

FBI00289 at pH 5.0
0 mM
40 mM
120 mM
2 mM
160 mM
80 mM
0.015
0.010
0.005
0.000
-0.005
-0.010
-0.015
-0.020
0
20
40
60
80
100
120
140
160

FIG. 12I

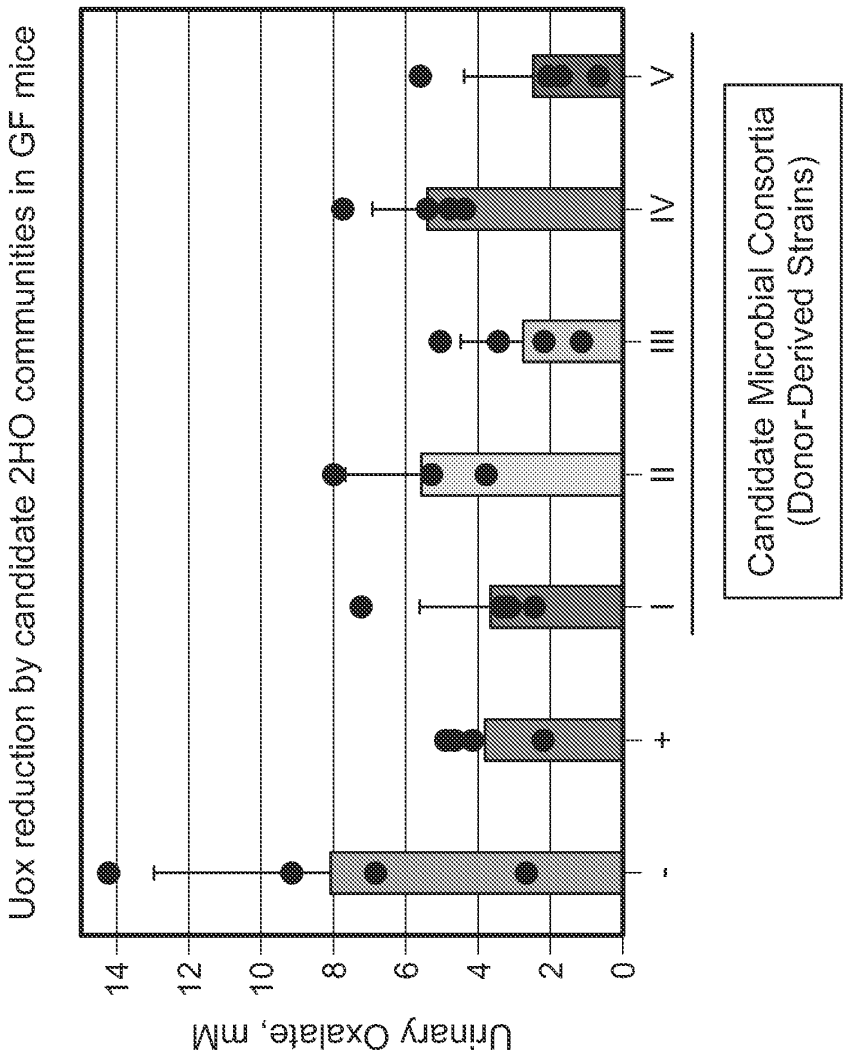

Uox reduction by candidate 2HO communities in GF mice
Urinary Oxalate, mM
0
2
4
6
8
10
12
14
-
+
I
II
III
IV
V
Candidate Microbial Consortia
(Donor-Derived Strains)

FIG. 13

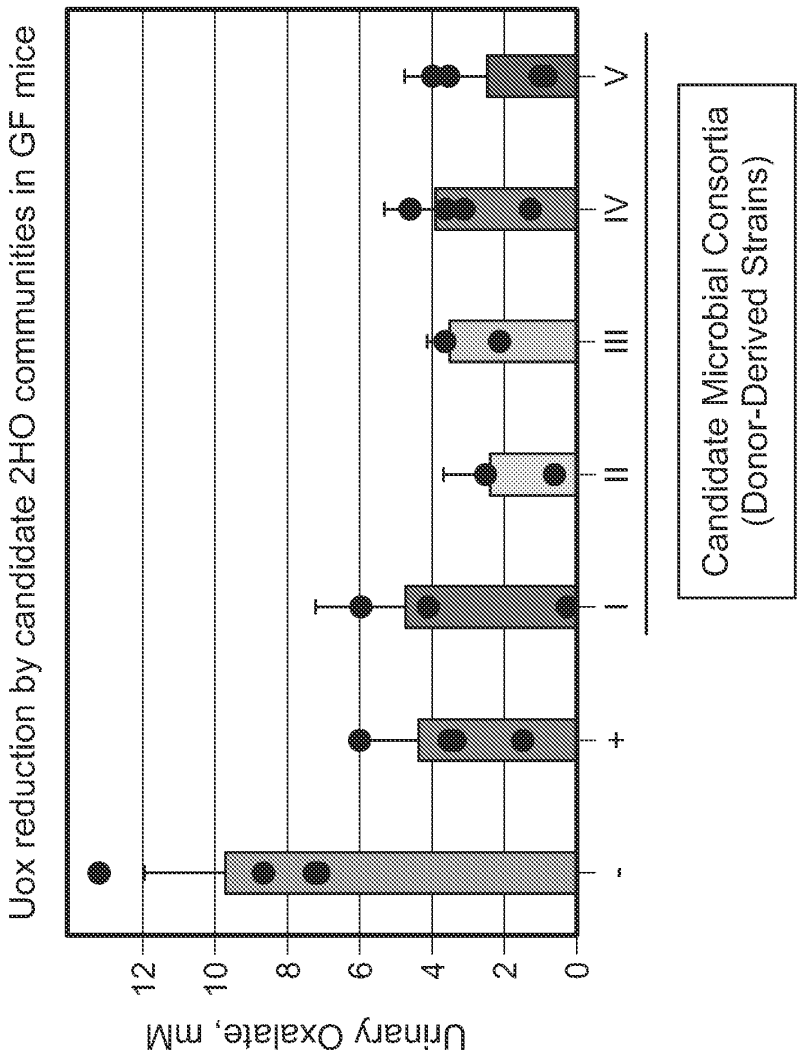

Uox reduction by candidate 2HO communities in GF mice
Urinary Oxalate, mM
0
2
4
6
8
10
12
-
+
I
II
III
IV
V
Candidate Microbial Consortia
(Donor-Derived Strains)

FIG. 14

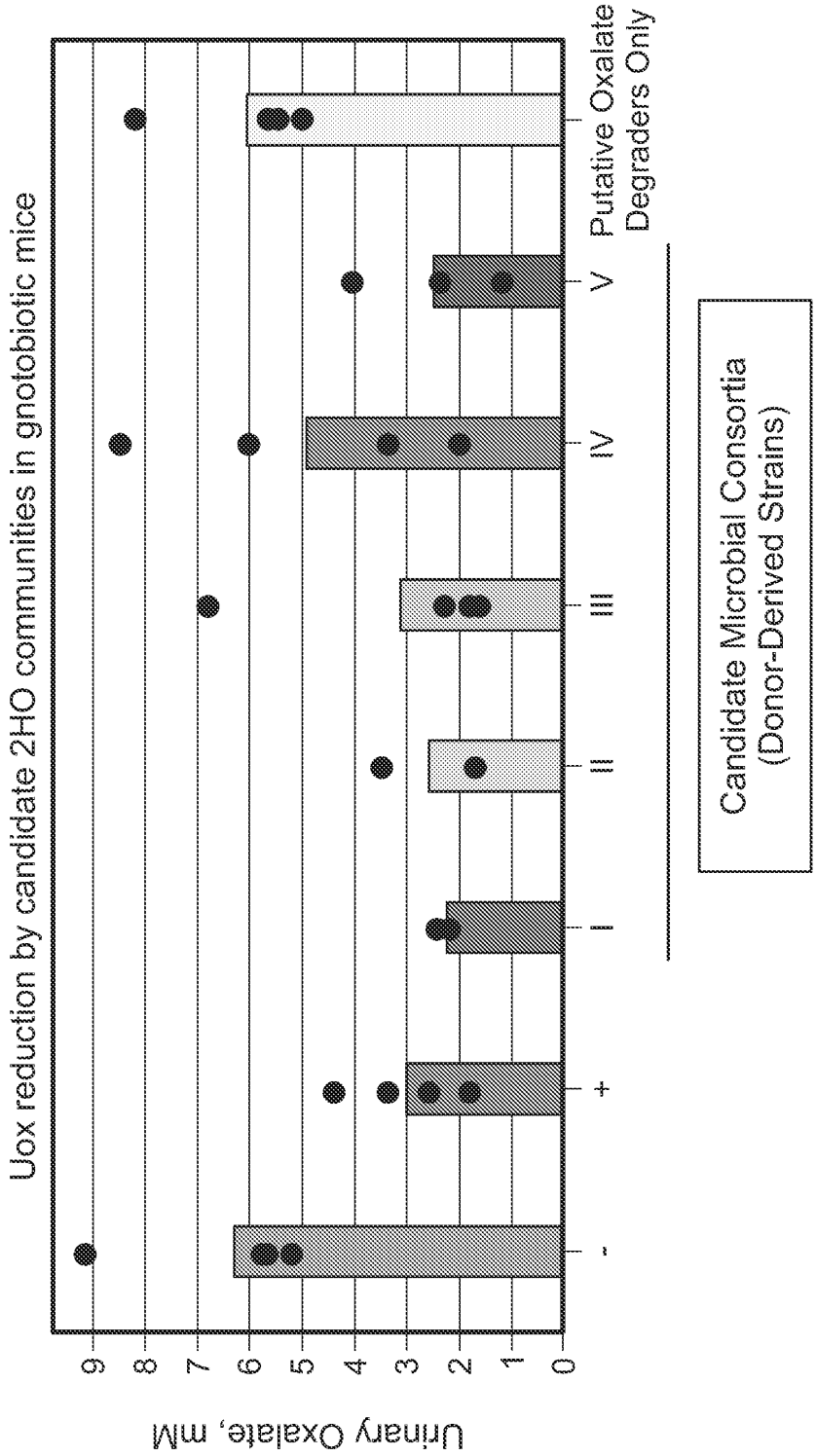

Uox reduction by candidate 2HO communities in gnotobiotic mice
Urinary Oxalate, mM
0
1
2
3
4
5
6
7
8
9
-
+
I
II
III
IV
V
Putative Oxalate Degraders Only
Candidate Microbial Consortia (Donor-Derived Strains)

FIG. 15

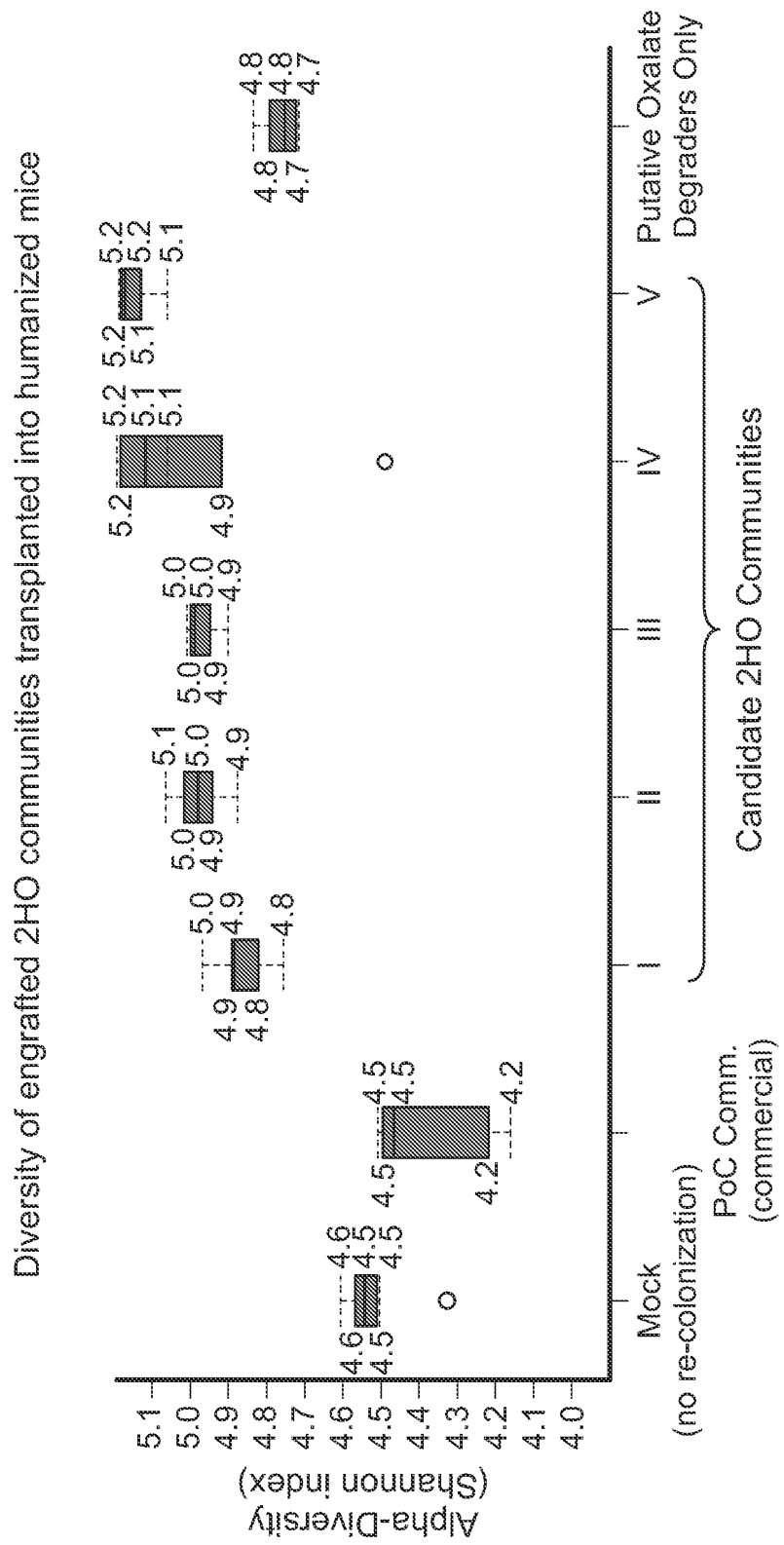

Diversity of engrafted 2HO communities transplanted into humanized mice
Alpha-Diversity (Shannon index)
5.1
5.0
4.9
4.8
4.7
4.6
4.5
4.4
4.3
4.2
4.1
4.0
Mock (no re-colonization)
PoC Comm. (commercial)
I
II
III
IV
V
Candidate 2HO Communities
Putative Oxalate Degraders Only

FIG. 16

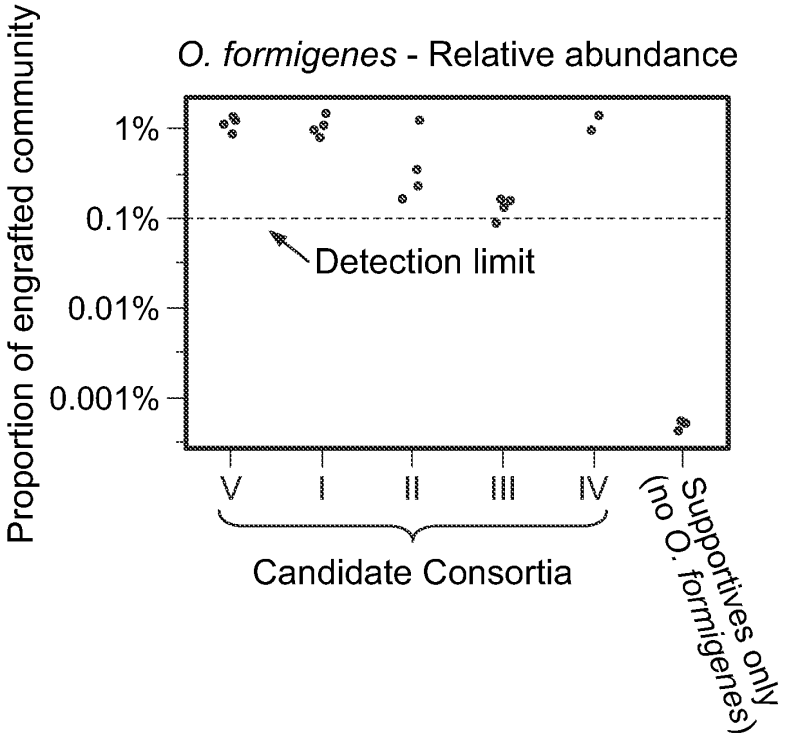


FIG. 17A

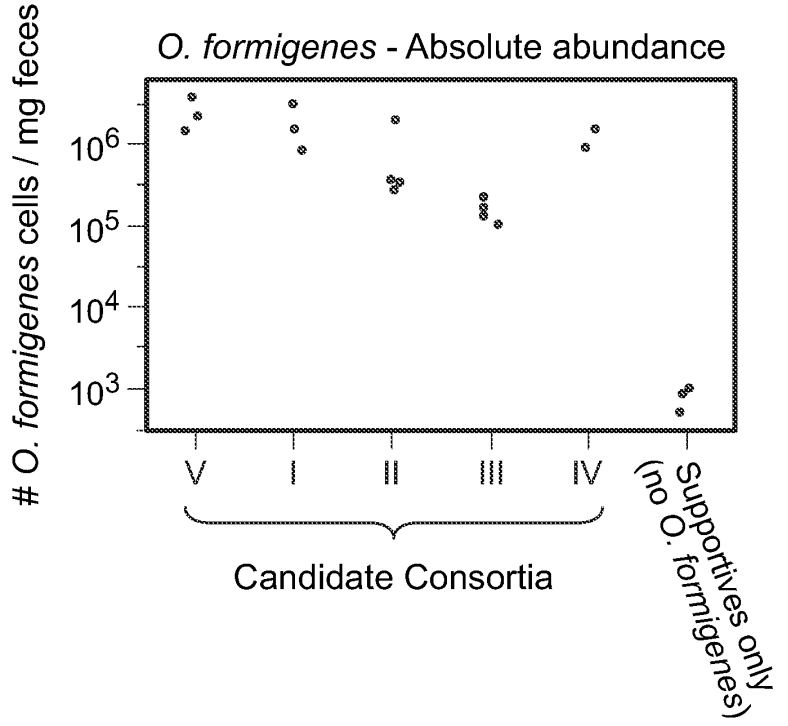


FIG. 17B

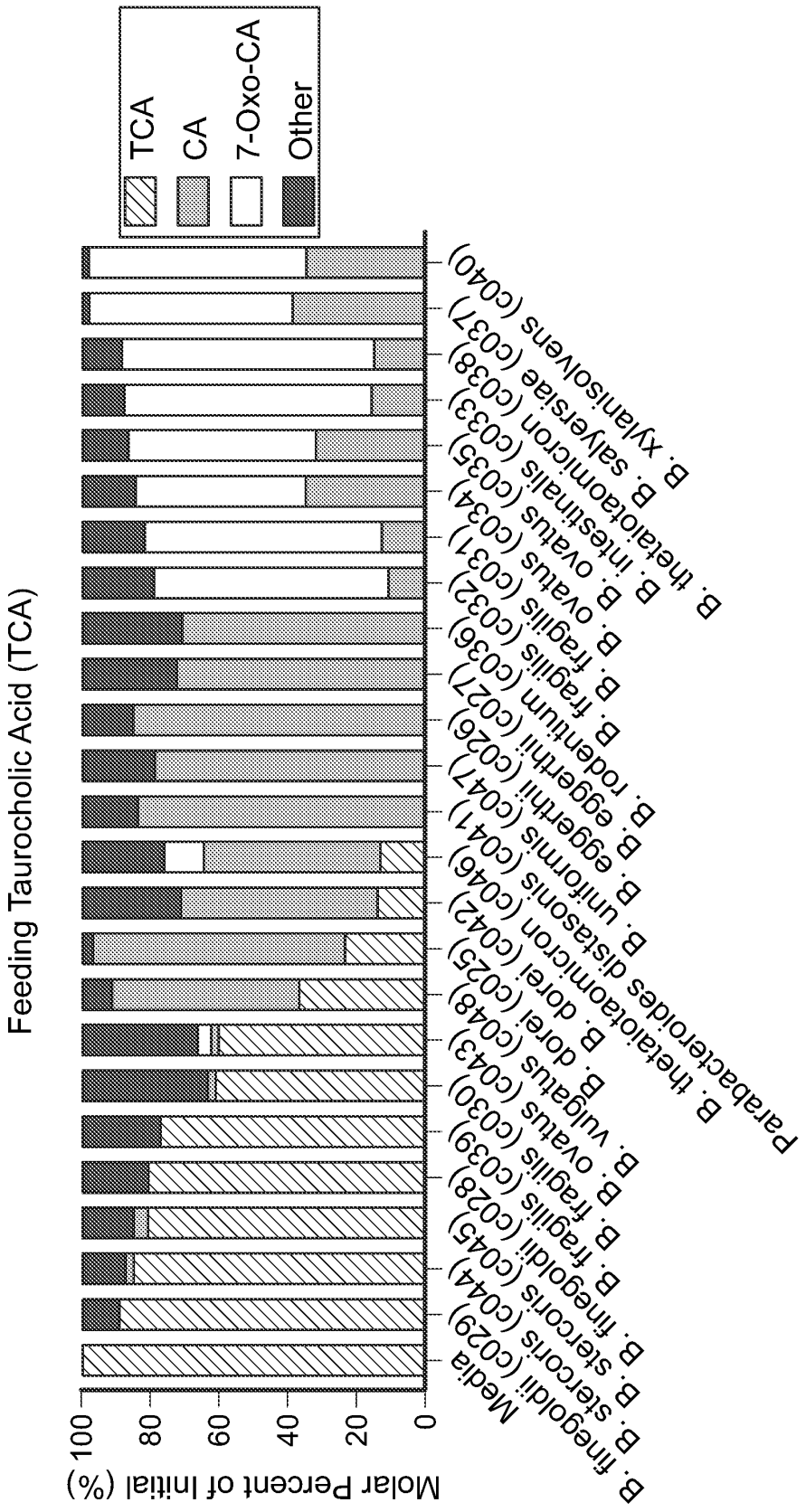

Feeding Taurocholic Acid (TCA)
Molar Percent of Initial (%)
100
80
60
40
20
0
TCA
CA
7-Oxo-CA
Other
Media
B. finegoldii (C029)
B. stercoris (C044)
B. finegoldii (C045)
B. fragilis (C028)
B. fragilis (C039)
B. ovatus (C030)
B. vulgatus (C043)
B. dorei (C048)
B. dorei (C025)
B. thetaiotaomicron (C042)
B. uniformis (C046)
B. eggerthii (C041)
B. eggerthii (C026)
B. rodentium (C027)
B. fragilis (C036)
B. fragilis (C032)
B. ovatus (C031)
B. ovatus (C034)
B. intestinalis (C035)
B. thetaiotaomicron (C033)
B. salyersiae (C038)
B. xylanisolvens (C037)
B. xylanisolvens (C040)
Parabacteroides distasonis (C047)

FIG. 18