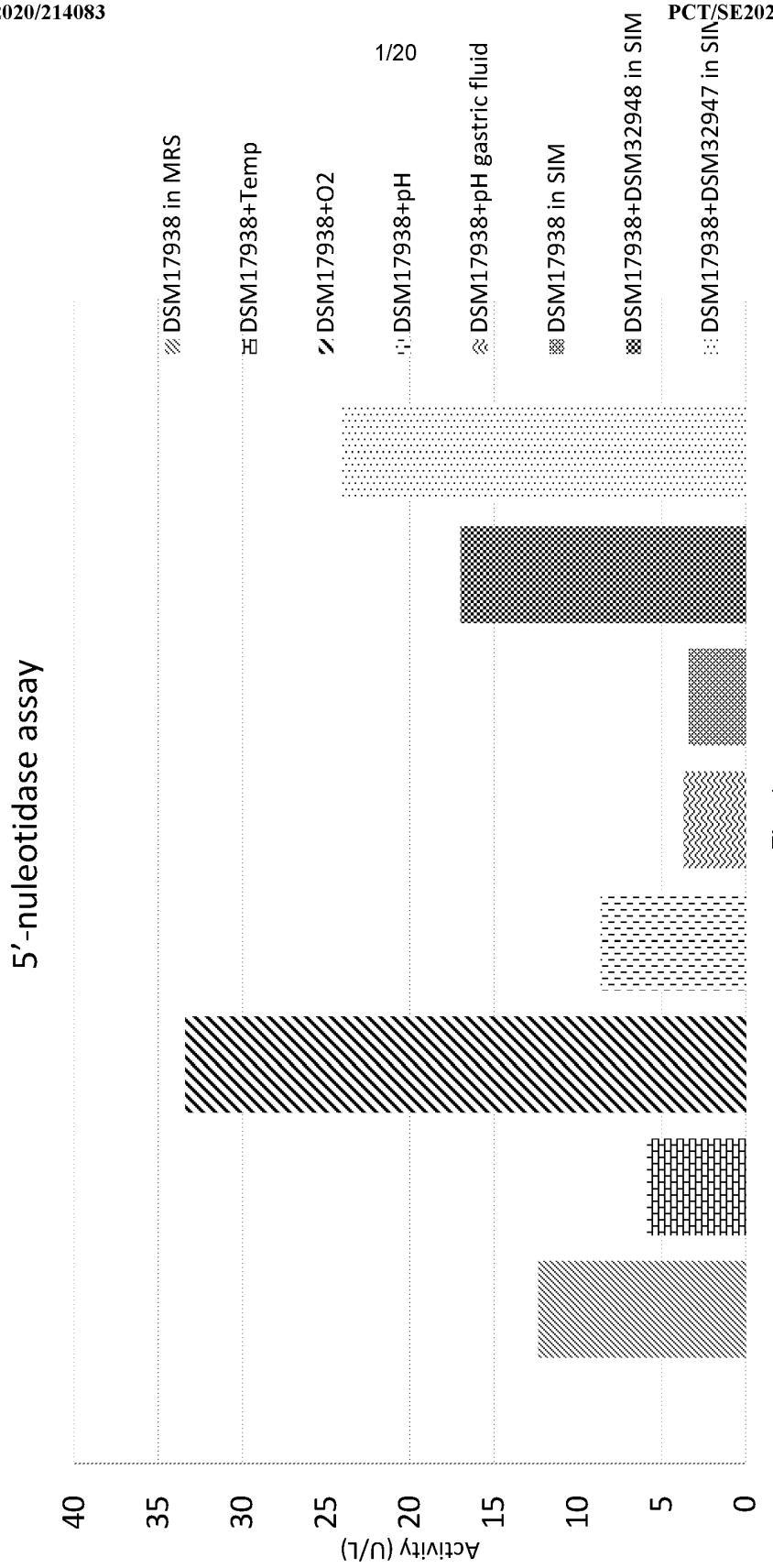

5'-nuleotidase assay
DSM17938 in MRS
DSM17938+Temp
DSM17938+O2
DSM17938+pH
DSM17938+pH gastric fluid
DSM17938 in SIM
DSM17938+DSM32948 in SIM
DSM17938+DSM32947 in SIM
Activity (U/L)
0
5
10
15
20
25
30
35
40

Fig. 1

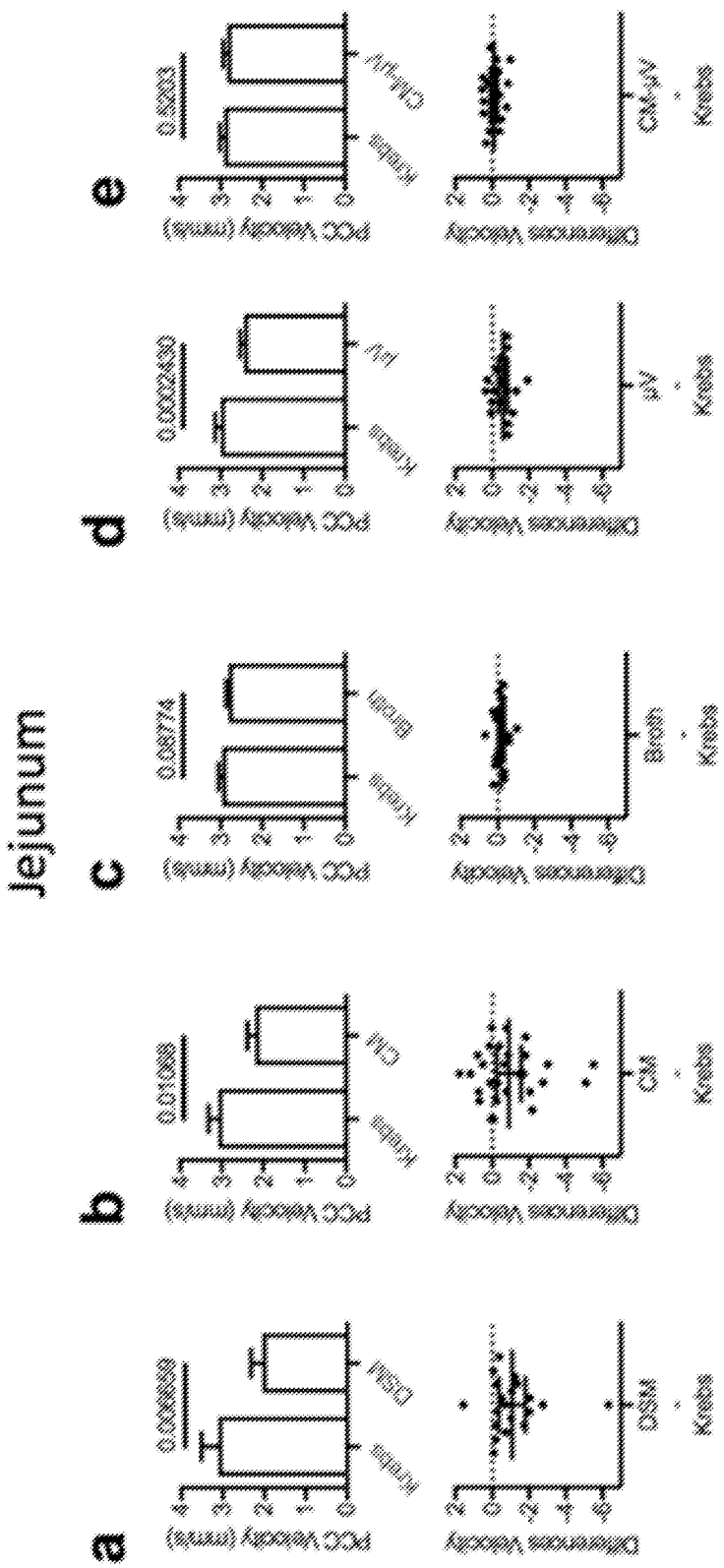

Jejunum
a
b
c
d
e
0.000659
0.01068
0.00774
0.0002450
0.0203
PCC viscosity (mm/s)
Difference viscosity
Krebs
DSM
CM
Brain
MV
CM+V

Fig. 2

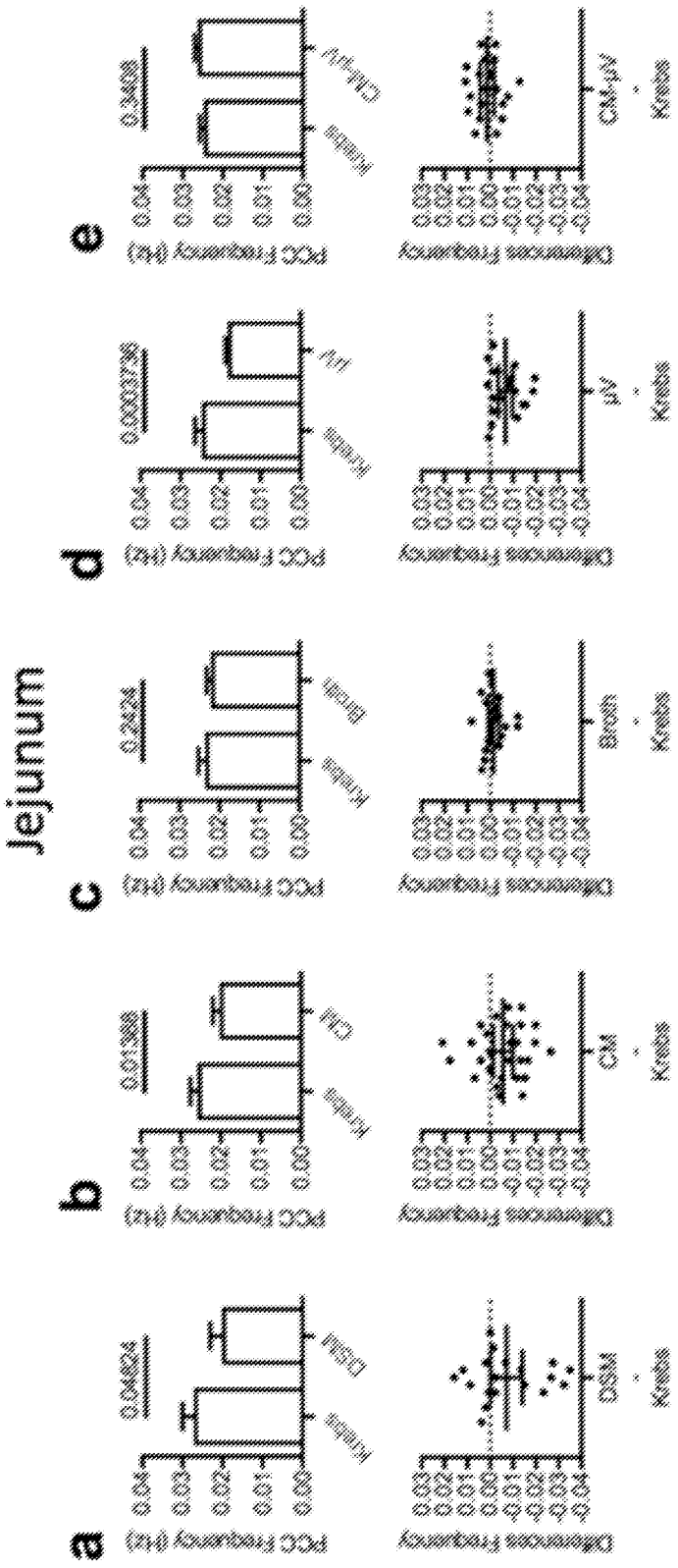

Jejunum
a
b
c
d
e
0.04624
0.01389
0.2424
0.000378
0.2408
Krebs
CM
Brain
μV
CM-μV
PCC Frequency (Hz)
Oscillation Frequency

Fig. 3

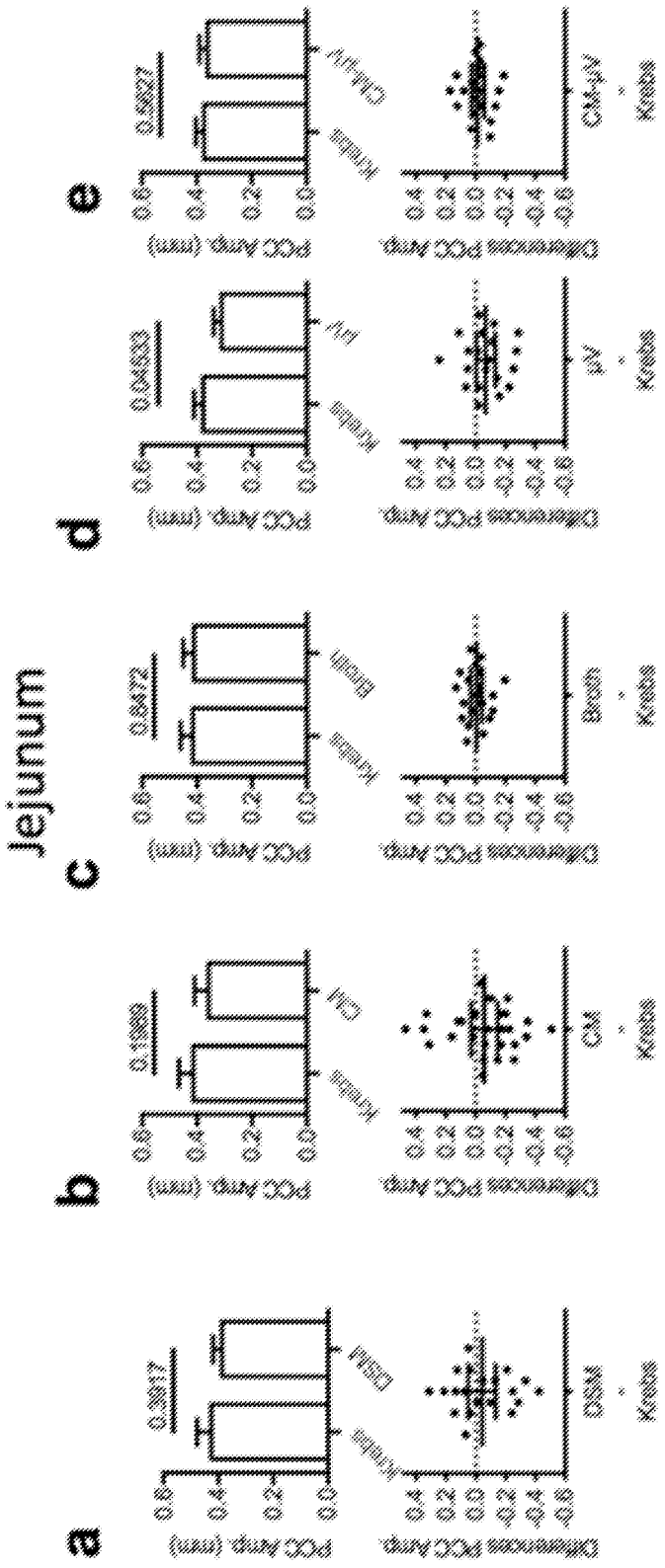
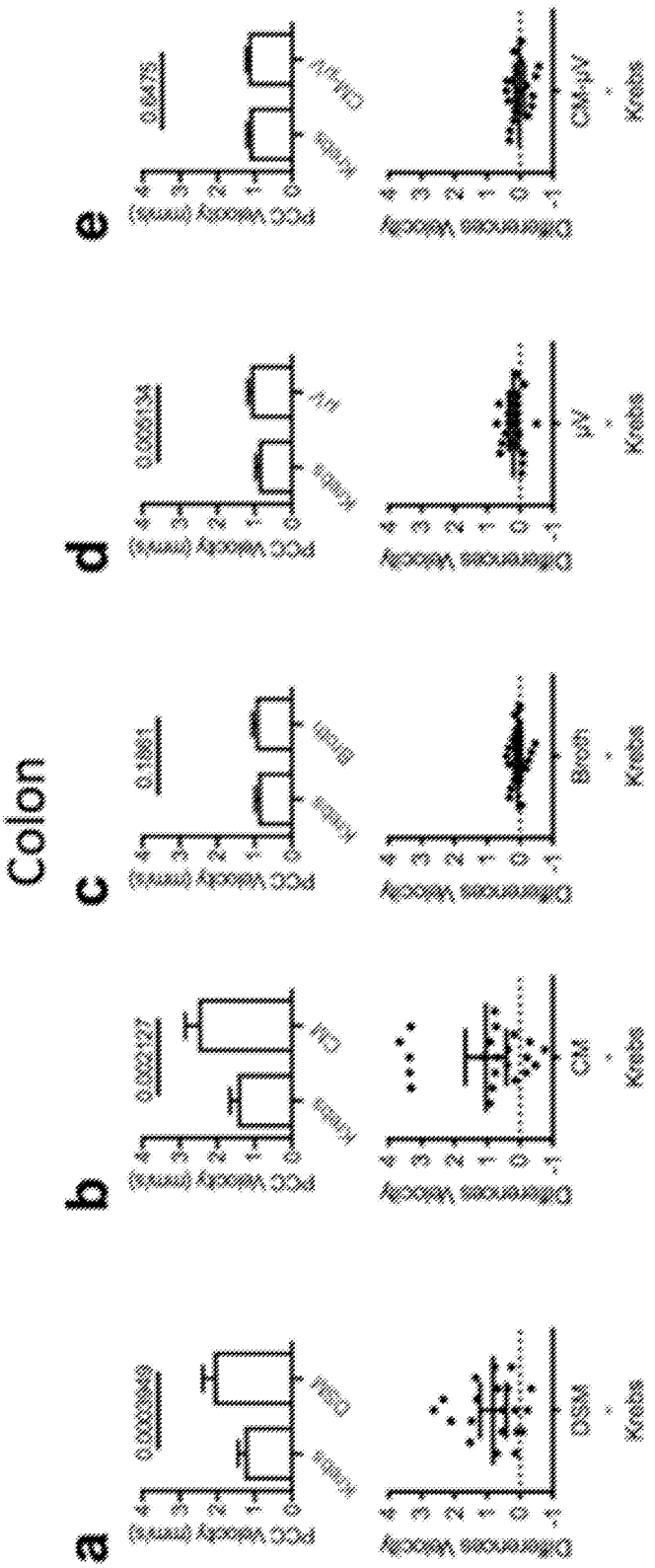

Jejunum
a
b
c
d
e
PCC Amp. (mm)
Difference PCC Amp.
0.2817
0.1869
0.6472
0.04833
0.5827
Krolls
CM
Broth
µV
CM-µV

Fig. 4


Colon
a
b
c
d
e
OSM
CM
Broth
UV
CM+UV
Krebs
Fig. 5

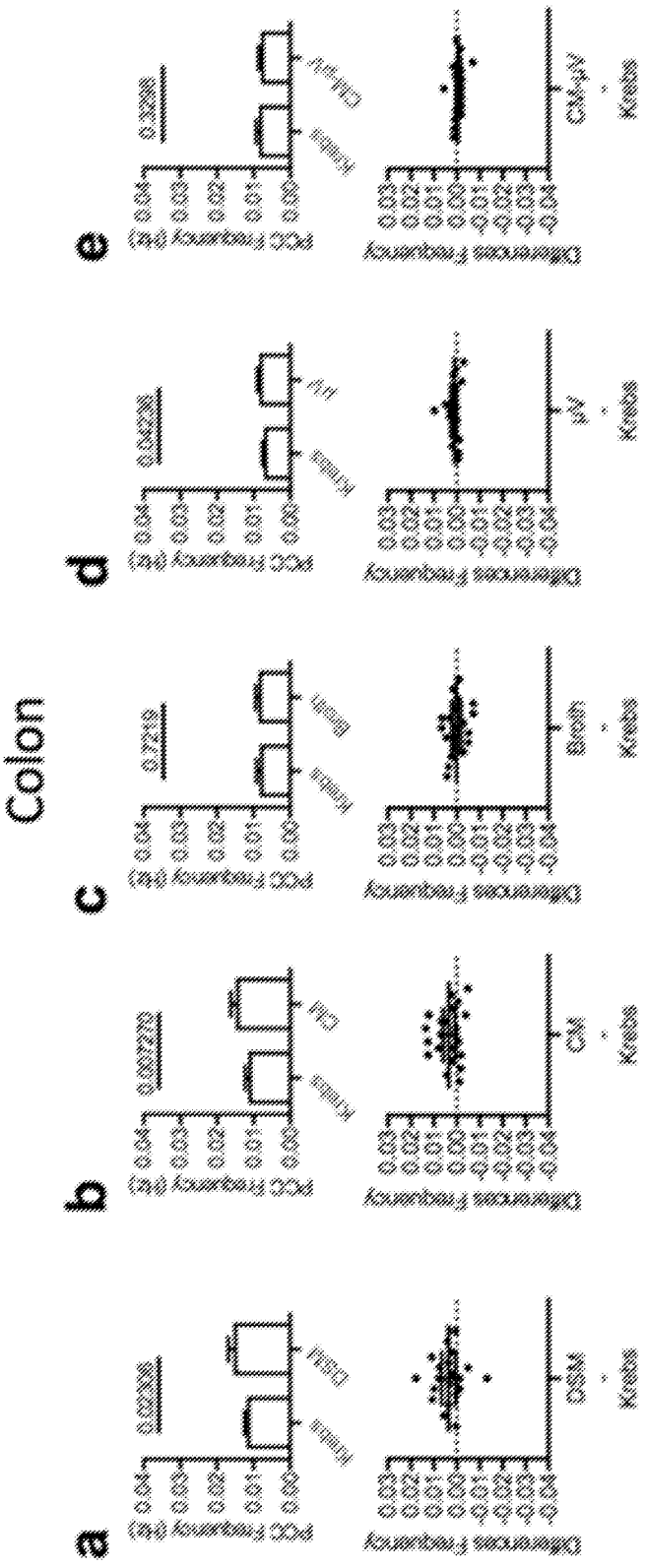
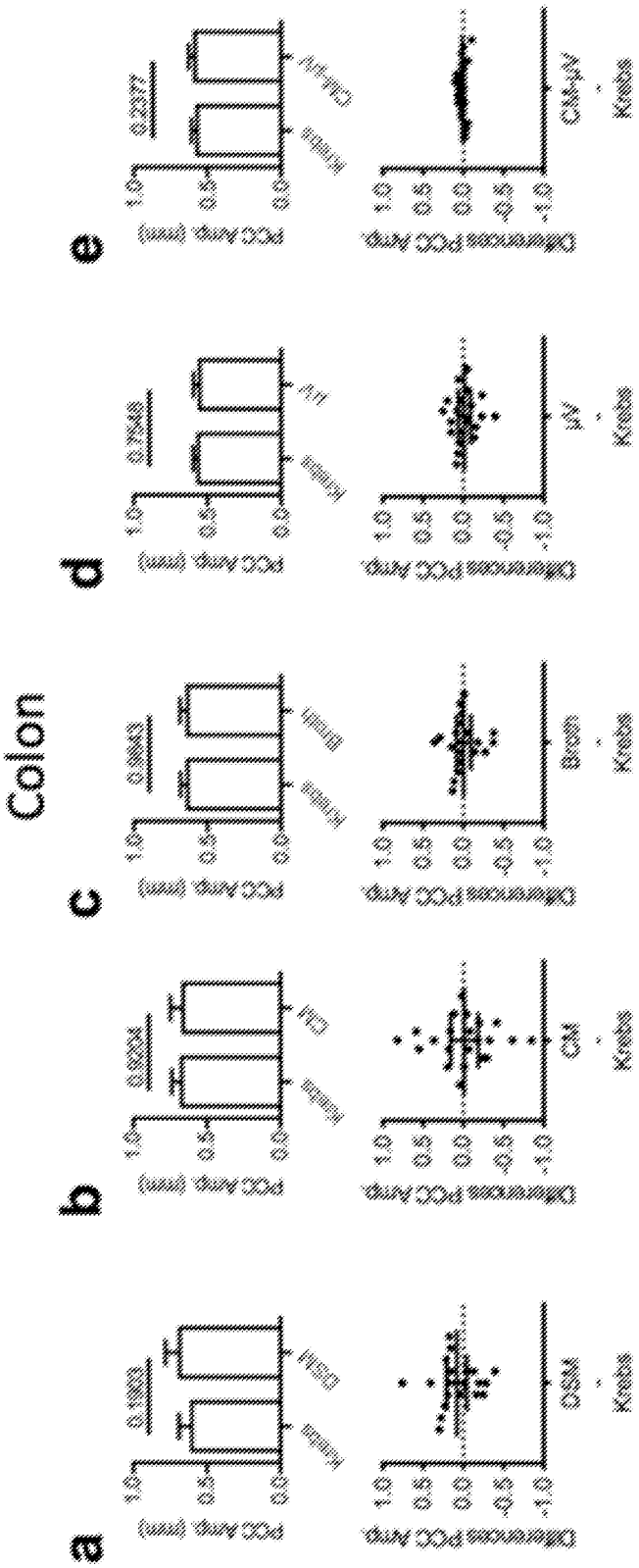

Colon
a
b
c
d
e
0.02200
0.007270
0.7219
0.04220
0.3066
CBM
CM
Broth
W
CM+W
Krebs
Cytotoxic Frequency
PCC Frequency (Hz)
0.04
0.03
0.02
0.01
0.00

Fig. 6


Colon
a
b
c
d
e
PCC Amp. (mm)
Difference PCC Amp.
Knife
CM
Broth
CM+W
W
Air
Fig. 7

Jejunum	DSM	CM	Broth	µV	CM - µV
Velocity	↓↓	↓↓	↓	↓↓	-
Frequency	↓↓	-	↓	↓↓	-
Peak Amplitude	↓	↓	-	↓	-

Colon	DSM	CM	Broth	µV	CM - µV
Velocity	↑↑	↑↑	-	↑	-
Frequency	↑↑	↑↑	-	↑	-
Peak Amplitude	-	-	-	-	-

Fig. 8

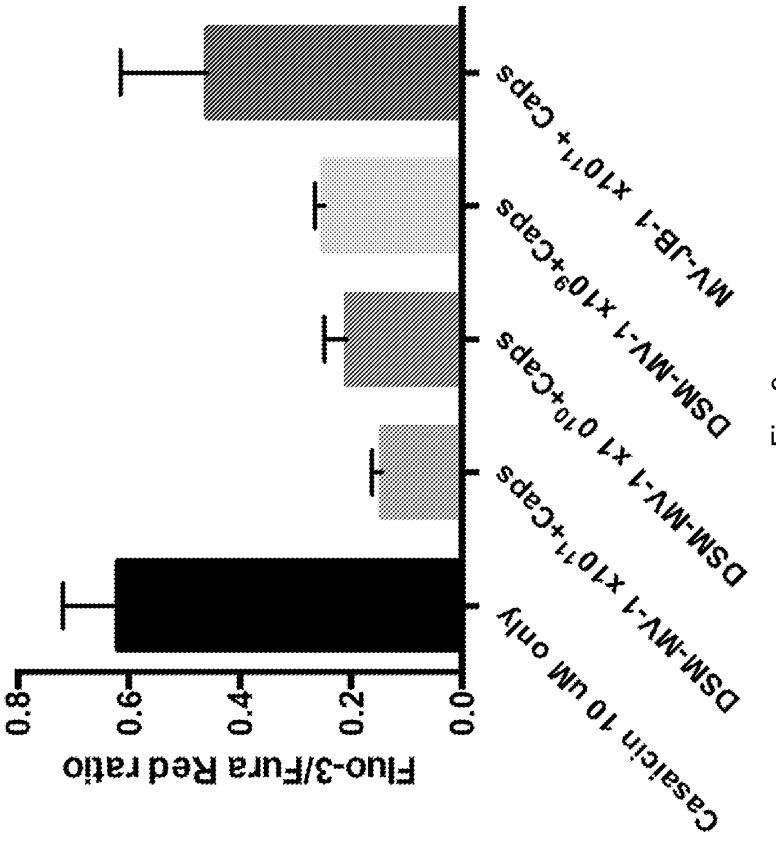

Fluo-3/Fura Red ratio
0.0
0.2
0.4
0.6
0.8
Casalcin 10 uM only
DSM-MV-1 x10^11+Caps
DSM-MV-1 x1 0^10+Caps
DSM-MV-1 x10^9+Caps
MV-JB-1 x10^11+ Caps

Fig. 9

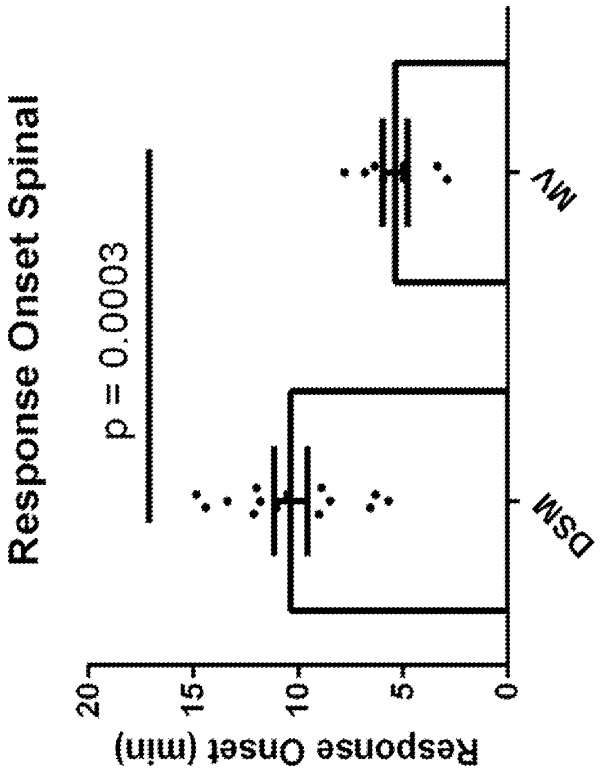

Response Onset Spinal
p = 0.0003
Response Onset (min)
0
5
10
15
20
DSM
MV

Fig. 10

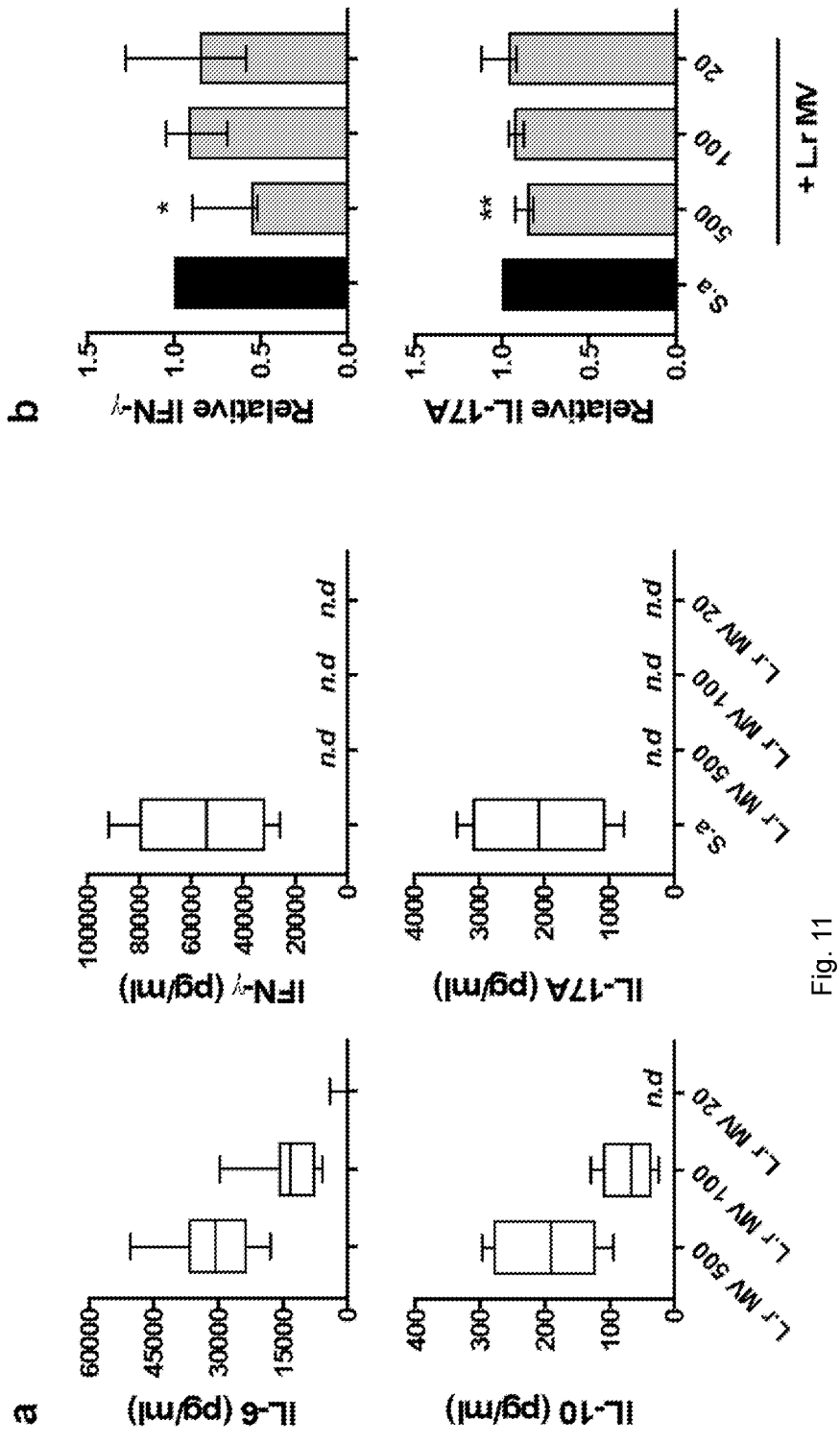

a
IL-6 (pg/ml)
60000
45000
30000
15000
0
IL-10 (pg/ml)
400
300
200
100
0
n.d
L.r MV 500
L.r MV 100
L.r MV 20
IFN-γ (pg/ml)
100000
80000
60000
40000
20000
0
n.d
n.d
n.d
IL-17A (pg/ml)
4000
3000
2000
1000
0
S.a
L.r MV 500
L.r MV 100
L.r MV 20
b
Relative IFN-γ
1.5
1.0
0.5
0.0
*
Relative IL-17A
**
S.a
500
100
20
+ Lr MV

Fig. 11

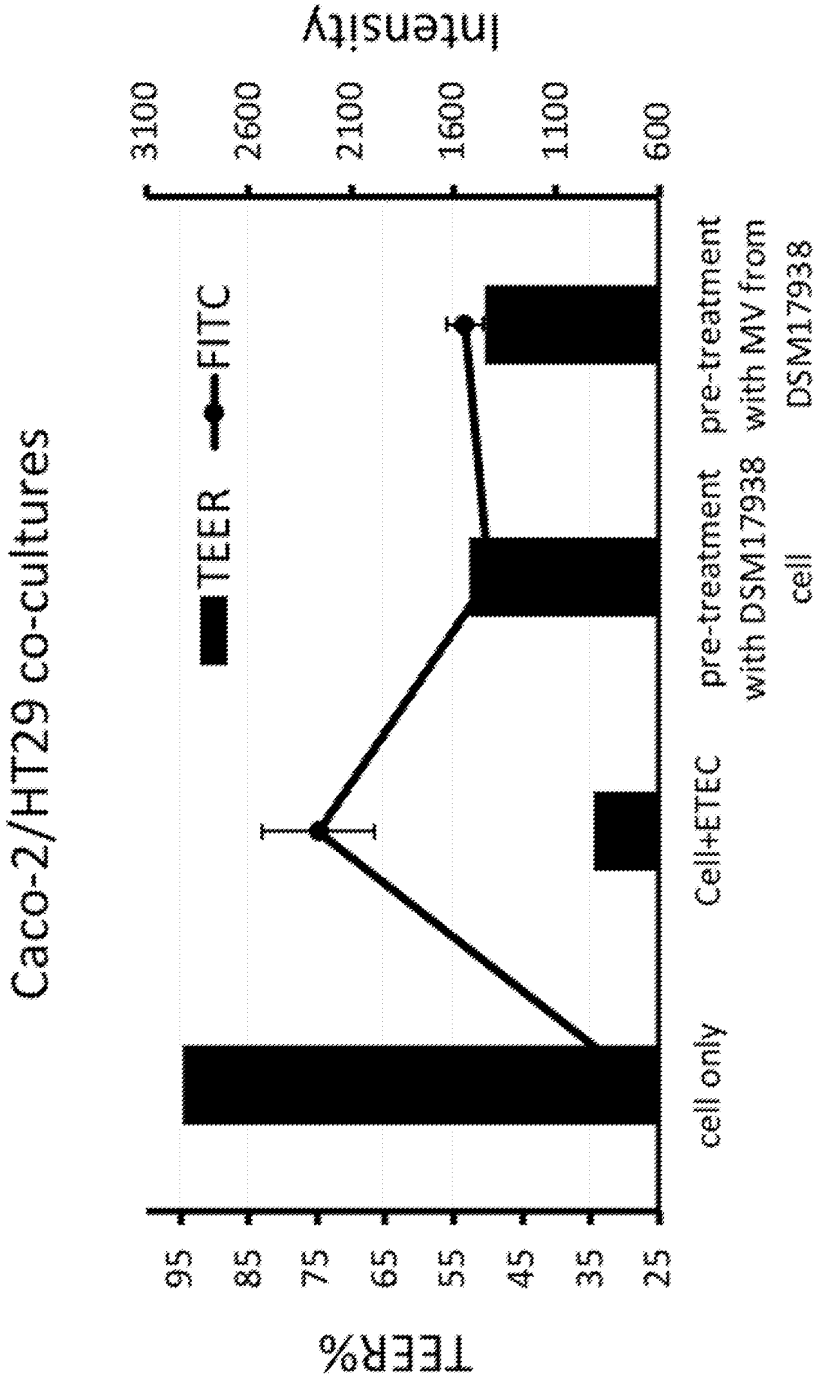

Caco-2/HT29 co-cultures
TEER
FITC
TEER%
Intensity
95
85
75
65
55
45
35
25
3100
2600
2100
1600
1100
600
cell only
Cell+ETEC
pre-treatment with DSM17938 cell
pre-treatment with MV from DSM17938

Fig. 12

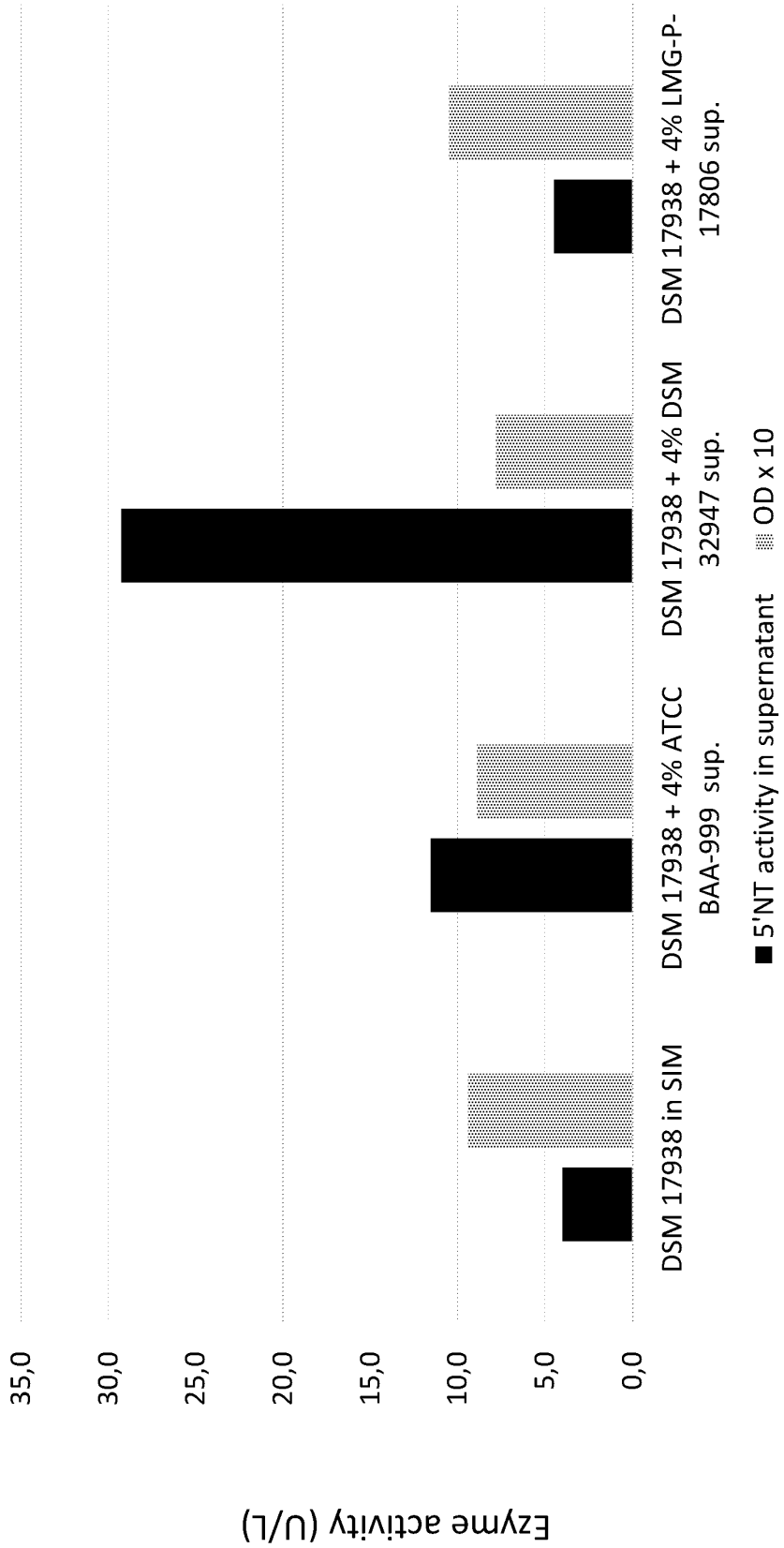

Enzyme activity (U/L)
35,0
30,0
25,0
20,0
15,0
10,0
5,0
0,0
DSM 17938 in SIM
DSM 17938 + 4% ATCC BAA-999 sup.
DSM 17938 + 4% DSM 32947 sup.
DSM 17938 + 4% LMG-P-17806 sup.
5'NT activity in supernatant
OD x 10

Fig. 13

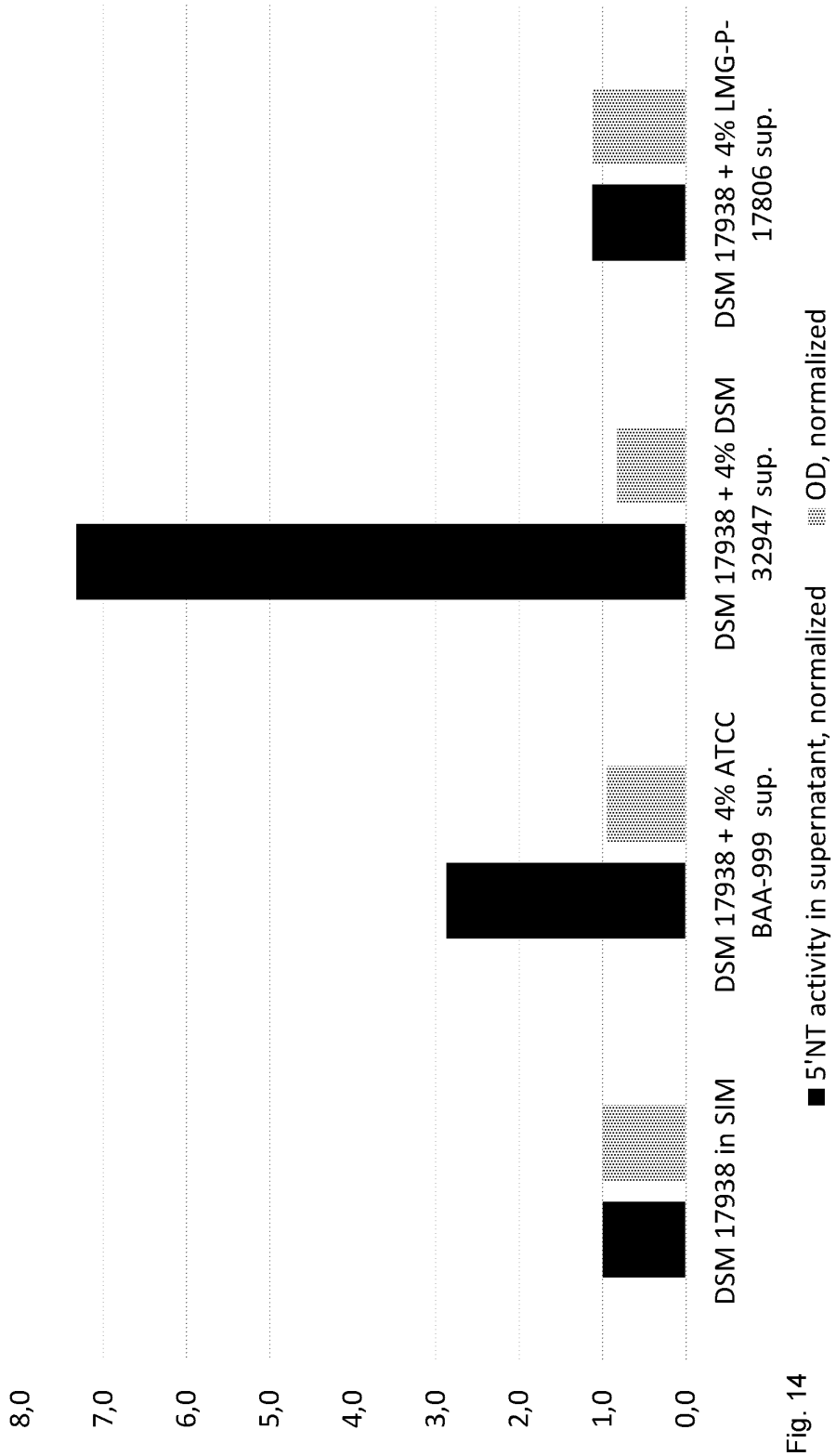

8,0
7,0
6,0
5,0
4,0
3,0
2,0
1,0
0,0
DSM 17938 in SIM
DSM 17938 + 4% ATCC BAA-999 sup.
DSM 17938 + 4% DSM 32947 sup.
DSM 17938 + 4% LMG-P-17806 sup.
5'NT activity in supernatant, normalized
OD, normalized

Fig. 14

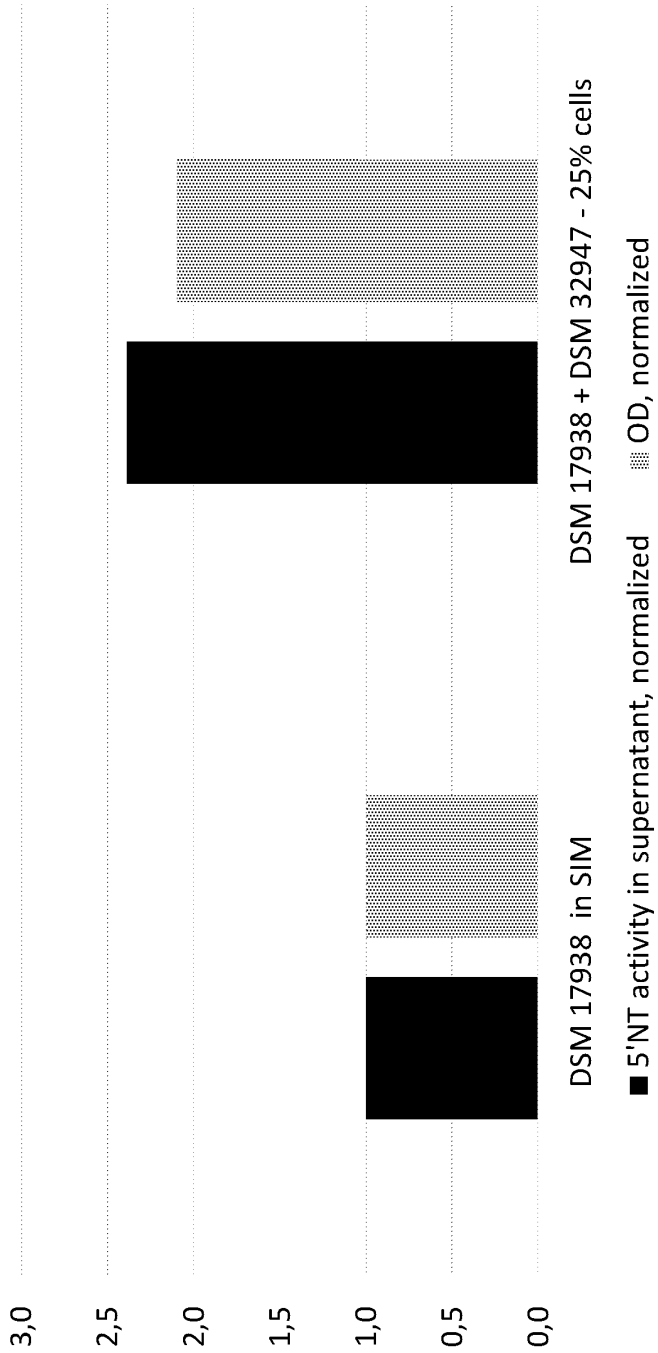

3,0
2,5
2,0
1,5
1,0
0,5
0,0
DSM 17938 in SIM
DSM 17938 + DSM 32947 - 25% cells
5'NT activity in supernatant, normalized
OD, normalized

Fig. 15

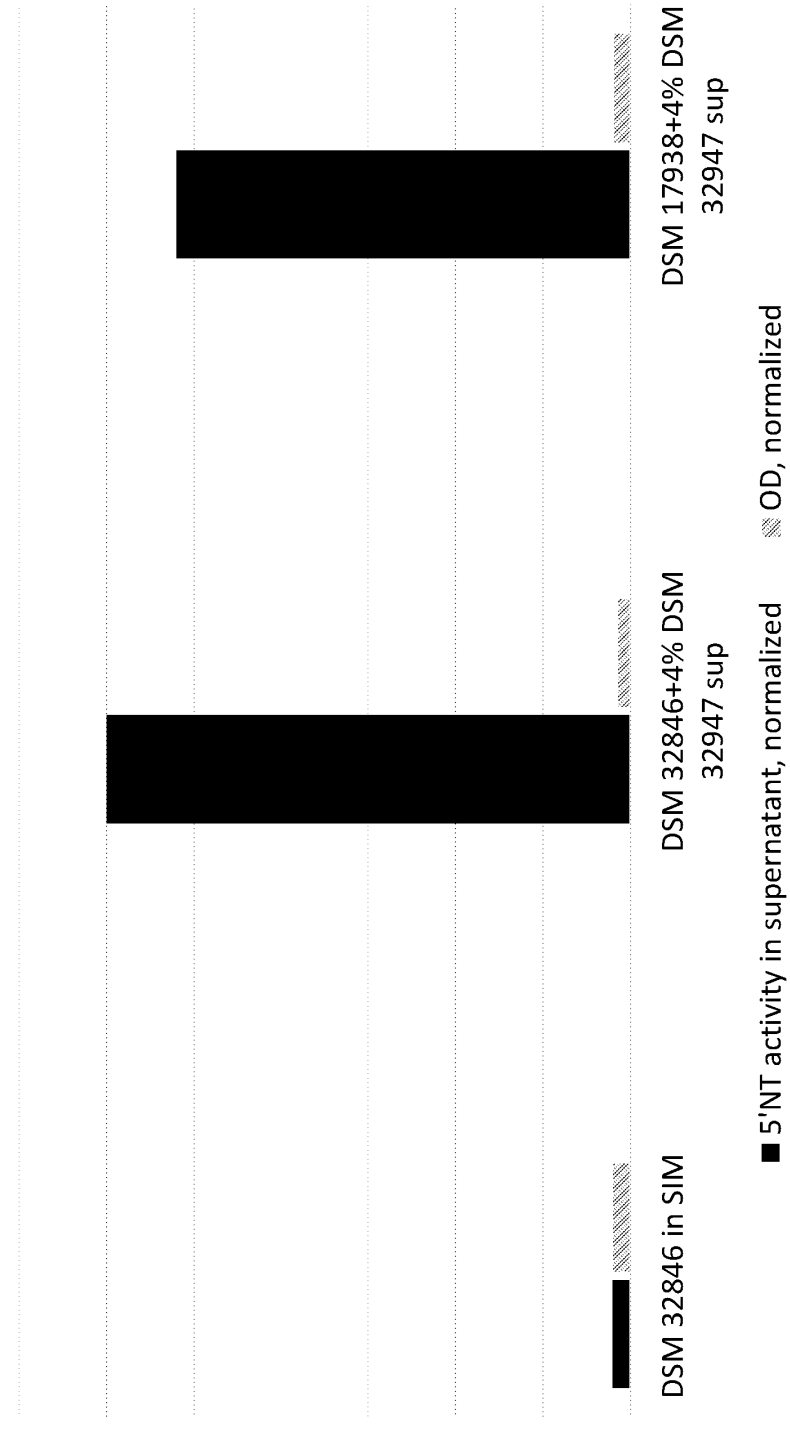

35
30
25
20
15
10
5
0
DSM 32846 in SIM
DSM 32846+4% DSM 32947 sup
DSM 17938+4% DSM 32947 sup
5'NT activity in supernatant, normalized
OD, normalized

Fig. 16

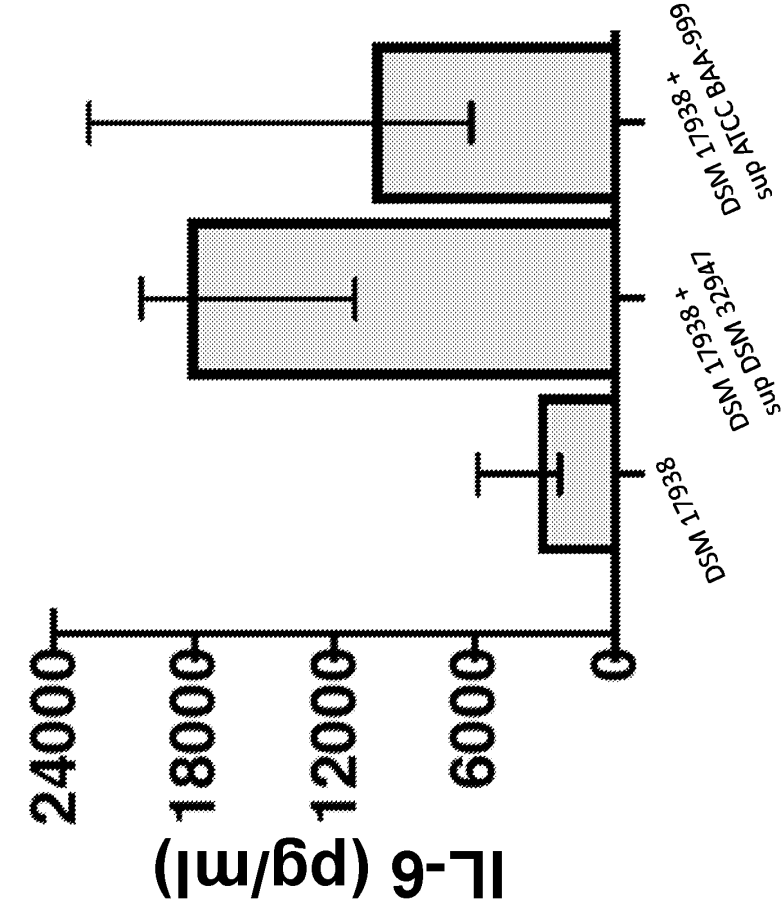

IL-6 (pg/ml)
24000
18000
12000
6000
0
DSM 17938
DSM 17938 + sup DSM 32947
DSM 17938 + sup ATCC BAA-999

Fig. 18

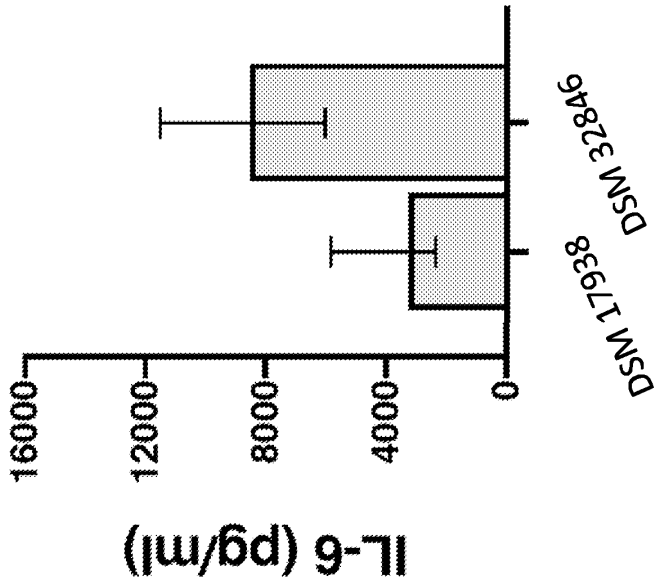

IL-6 (pg/ml)
16000
12000
8000
4000
0
DSM 17938
DSM 32846

Fig. 17

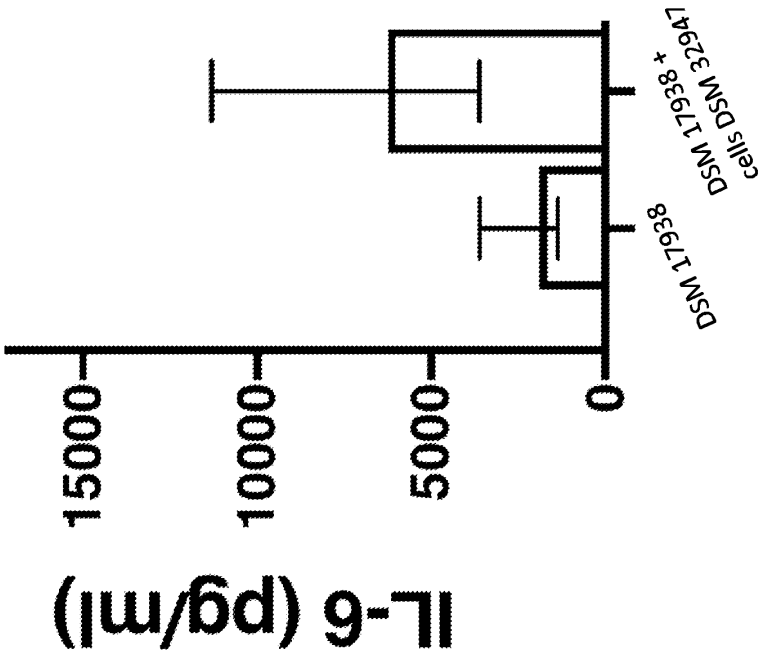

IL-6 (pg/ml)
15000
10000
5000
0
DSM 17938
cells DSM 17938 + DSM 32947

Fig. 20

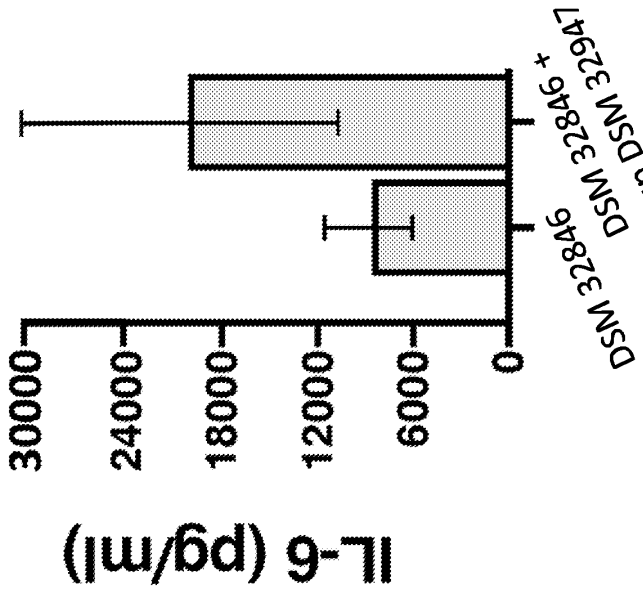

IL-6 (pg/ml)
30000
24000
18000
12000
6000
0
DSM 32846
sup DSM 32846 + DSM 32947

Fig. 19

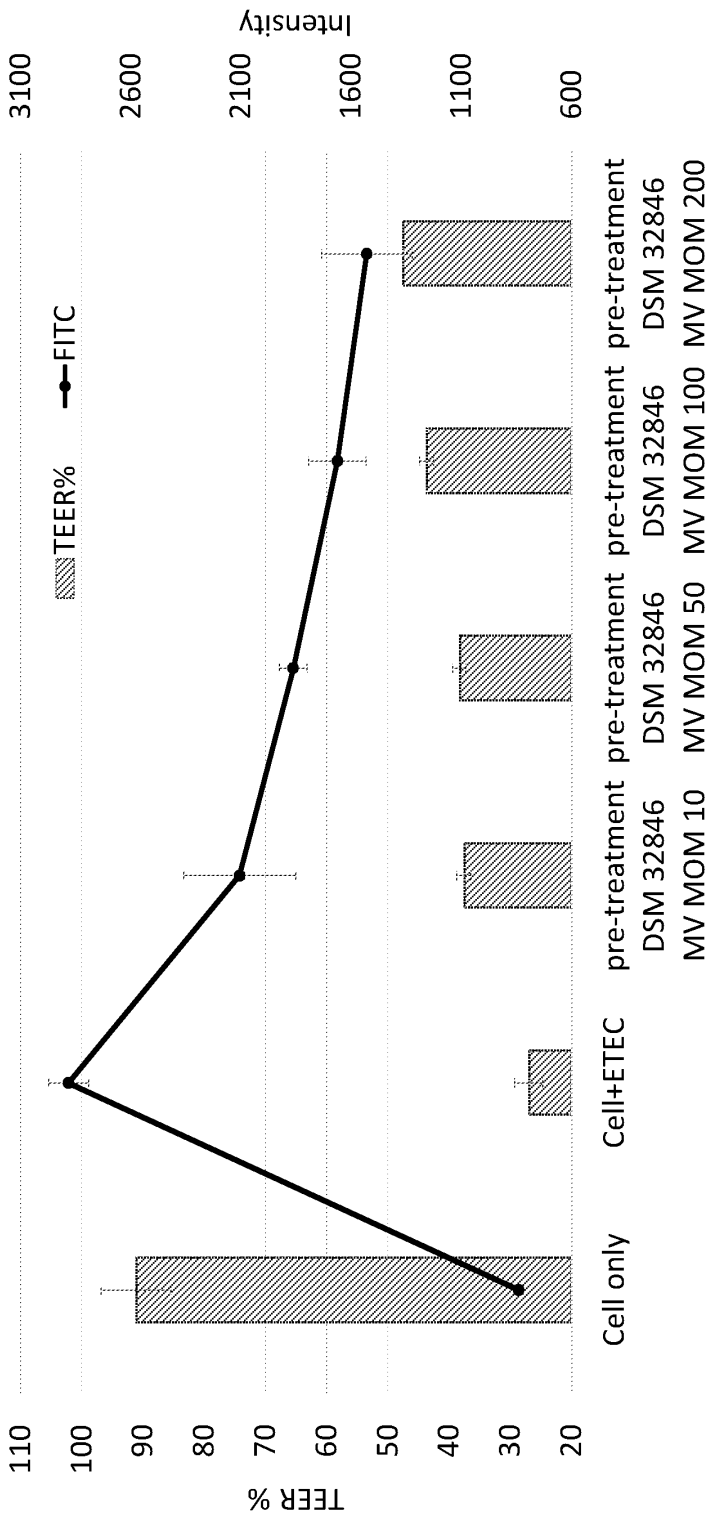

Intensity
3100
2600
2100
1600
1100
600
TEER%
FITC
TEER %
110
100
90
80
70
60
50
40
30
20
Cell only
Cell+ETEC
pre-treatment DSM 32846 MV MOM 10
pre-treatment DSM 32846 MV MOM 50
pre-treatment DSM 32846 MV MOM 100
pre-treatment DSM 32846 MV MOM 200

Fig. 21

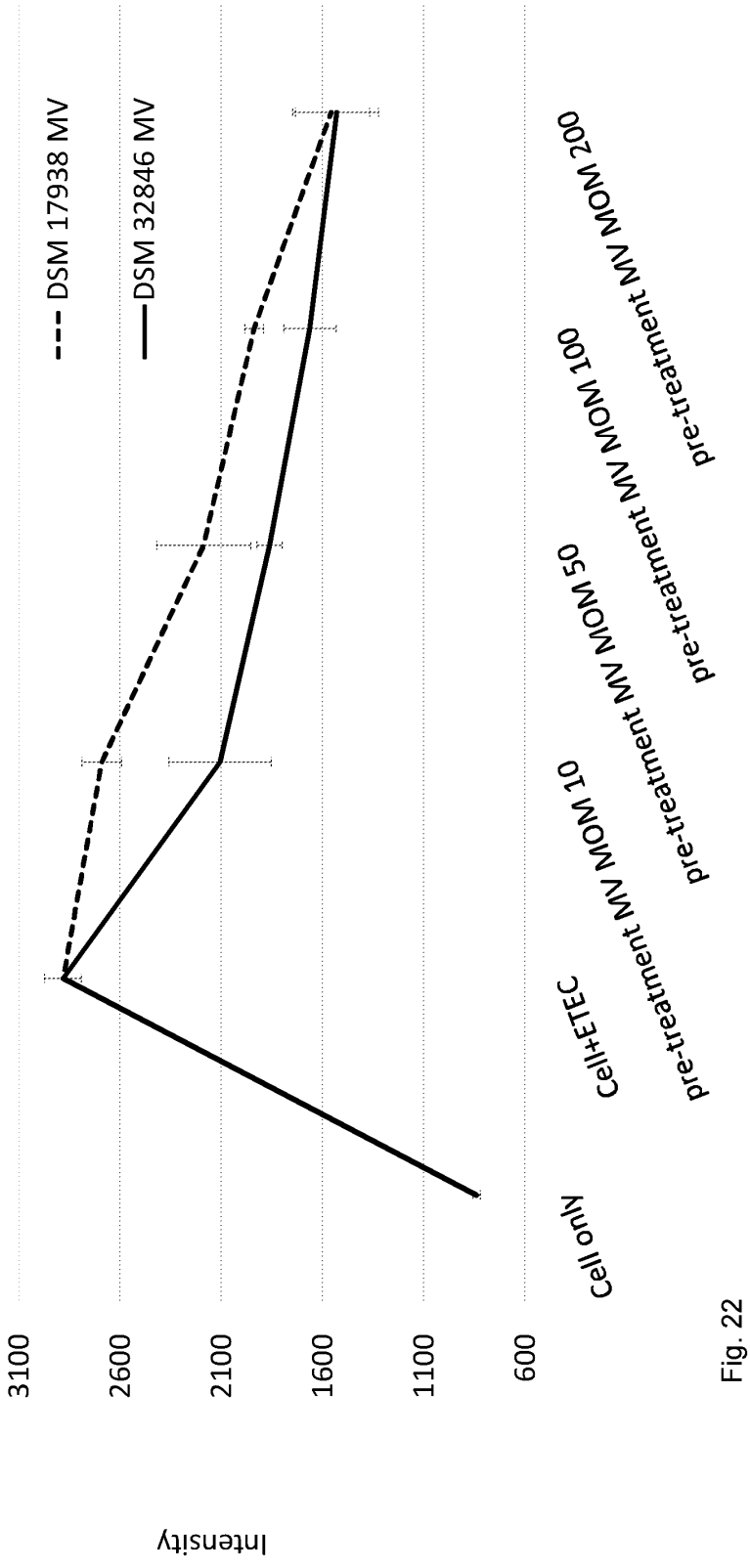

DSM 17938 MV
DSM 32846 MV
3100
2600
2100
1600
1100
600
Intensity
Cell only
Cell+ETEC
pre-treatment MV MOM 10
pre-treatment MV MOM 50
pre-treatment MV MOM 100
pre-treatment MV MOM 200

Fig. 22