FIG. 1A

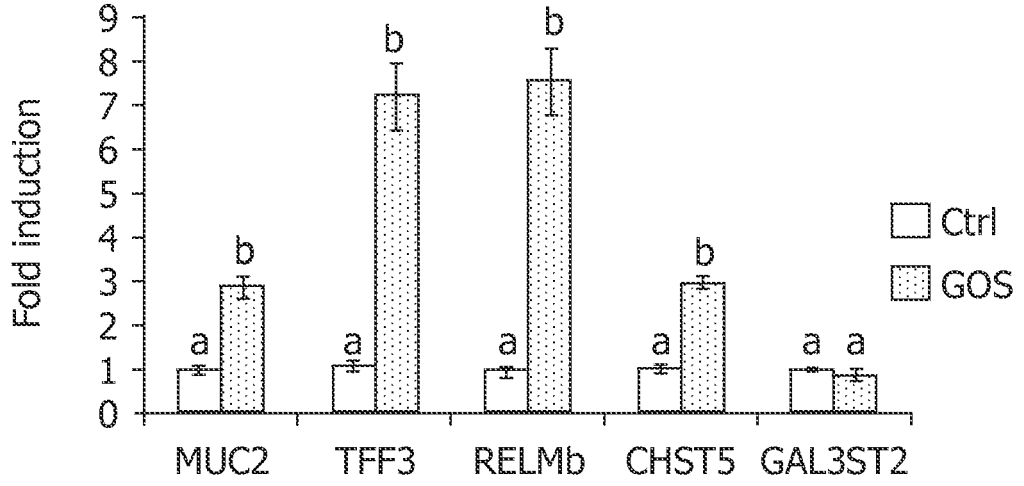



FIG. 1B

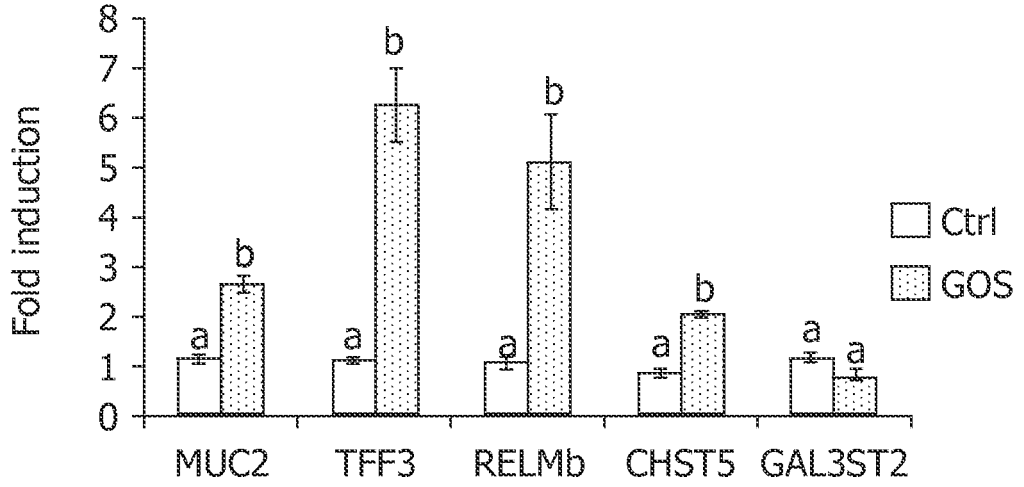



FIG. 1C

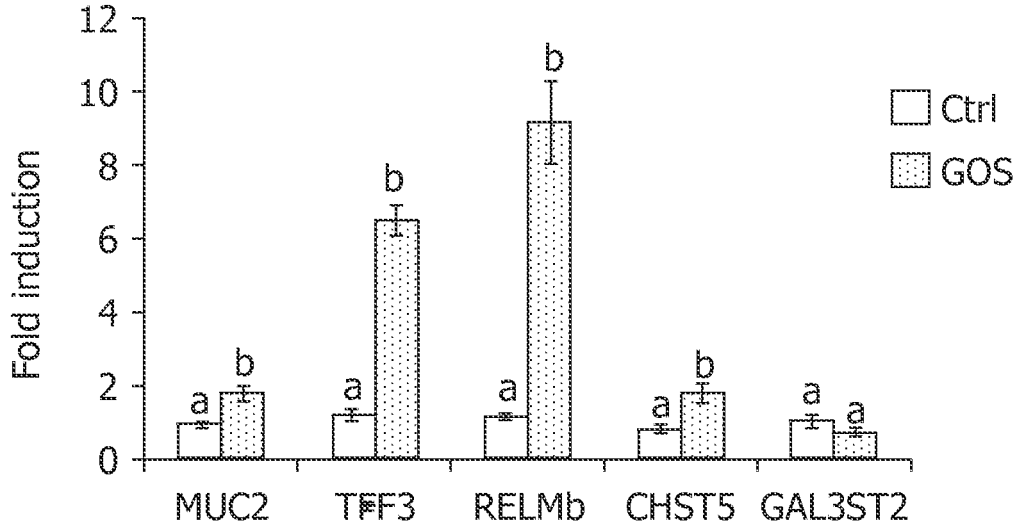


FIG. 2A

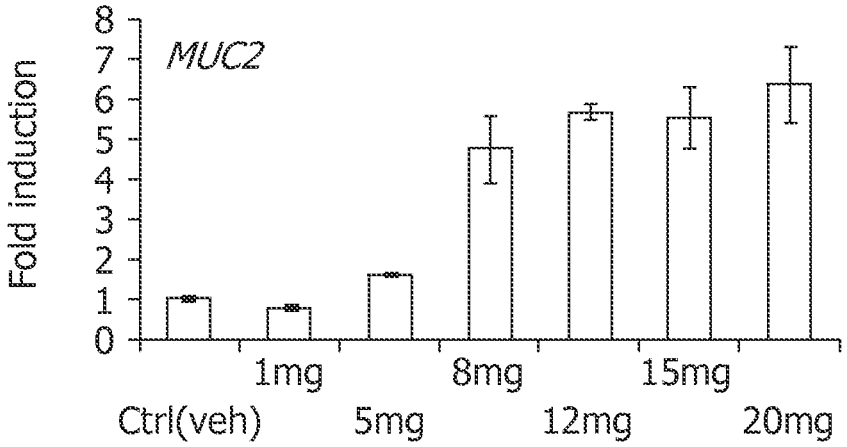



FIG. 2B

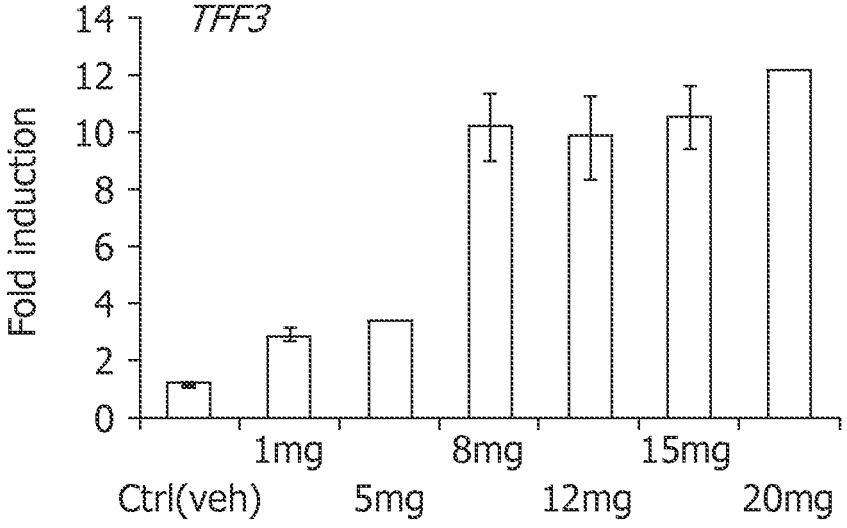



FIG. 2C

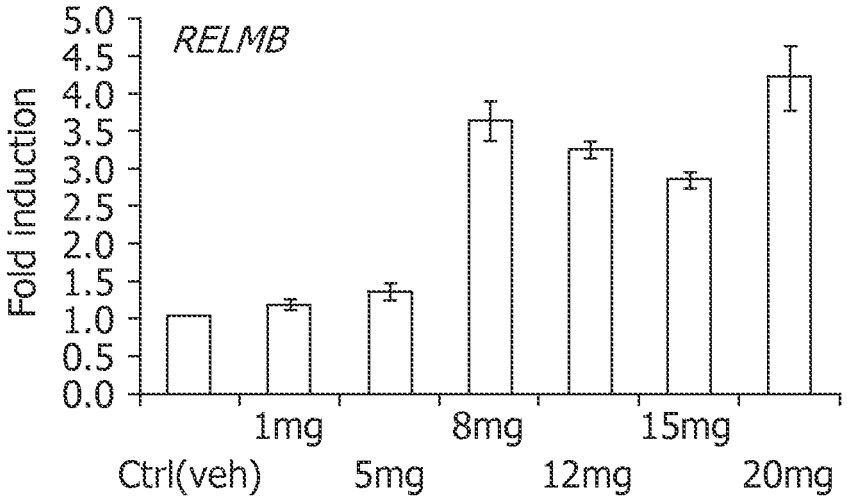


FIG. 2D

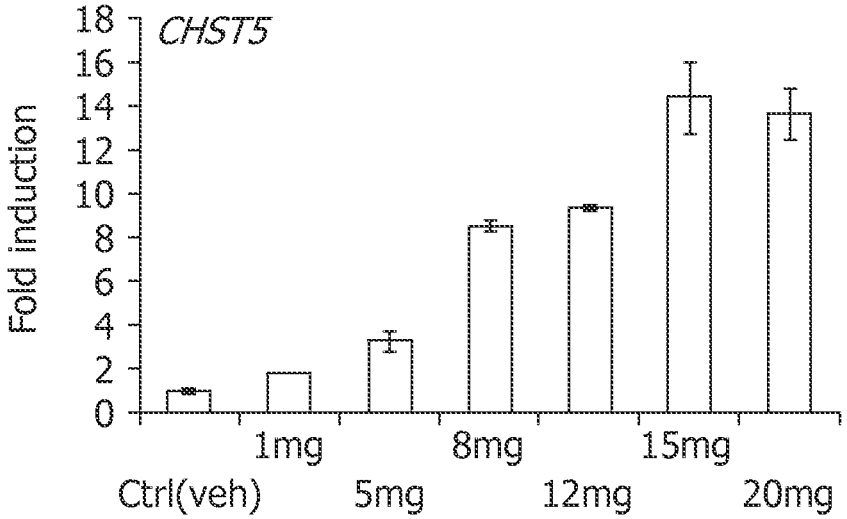

CHST5
Fold induction
18
16
14
12
10
8
6
4
2
0
1mg
8mg
15mg
Ctrl(veh)
5mg
12mg
20mg

FIG. 2E

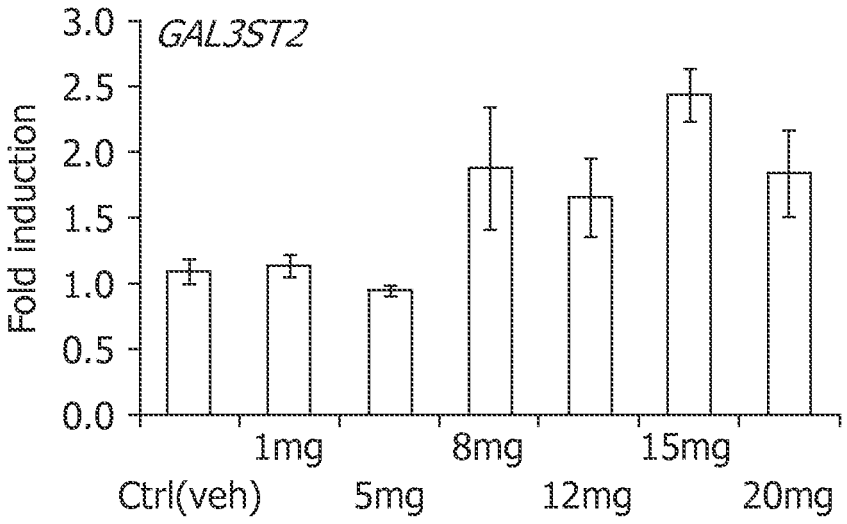

GAL3ST2
Fold induction
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1mg
8mg
15mg
Ctrl(veh)
5mg
12mg
20mg

FIG. 3A

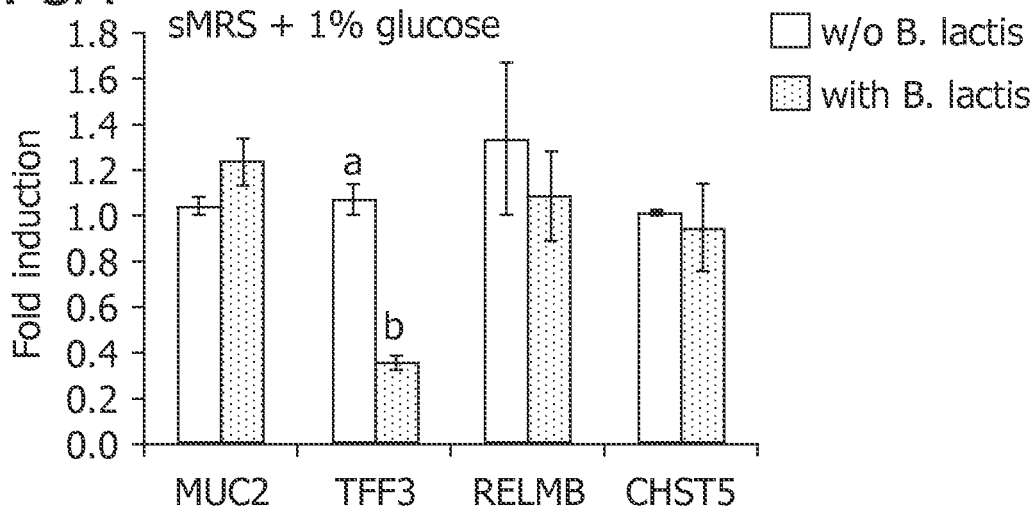

sMRS + 1% glucose
w/o B. lactis
with B. lactis
Fold induction
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
a
b
MUC2
TFF3
RELMB
CHST5

FIG. 3B

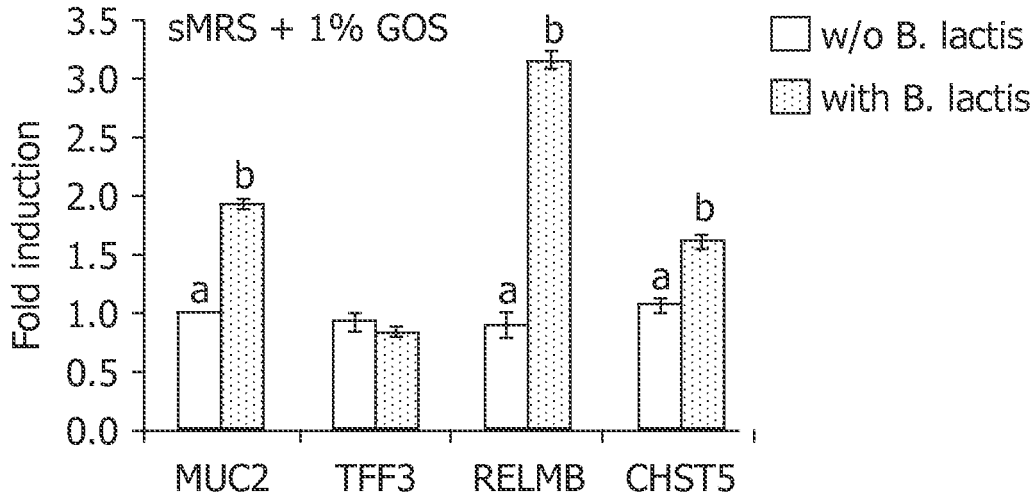

sMRS + 1% GOS
w/o B. lactis
with B. lactis
Fold induction
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
a
b
a
b
a
b
MUC2
TFF3
RELMB
CHST5

FIG. 4A

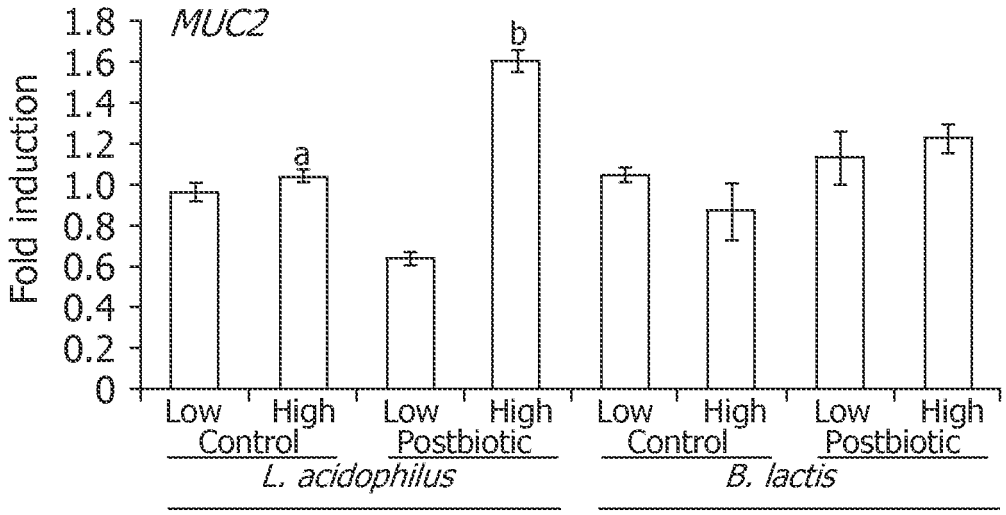



FIG. 4B

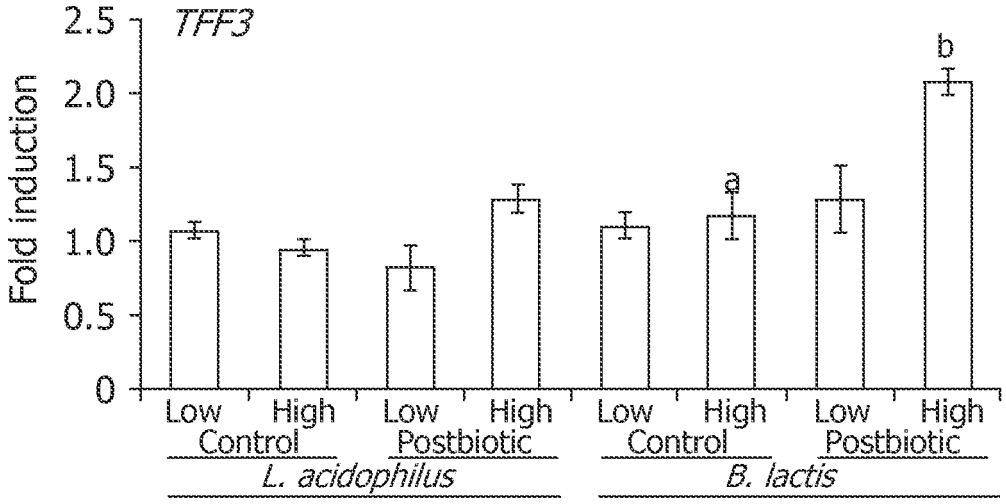



FIG. 4C

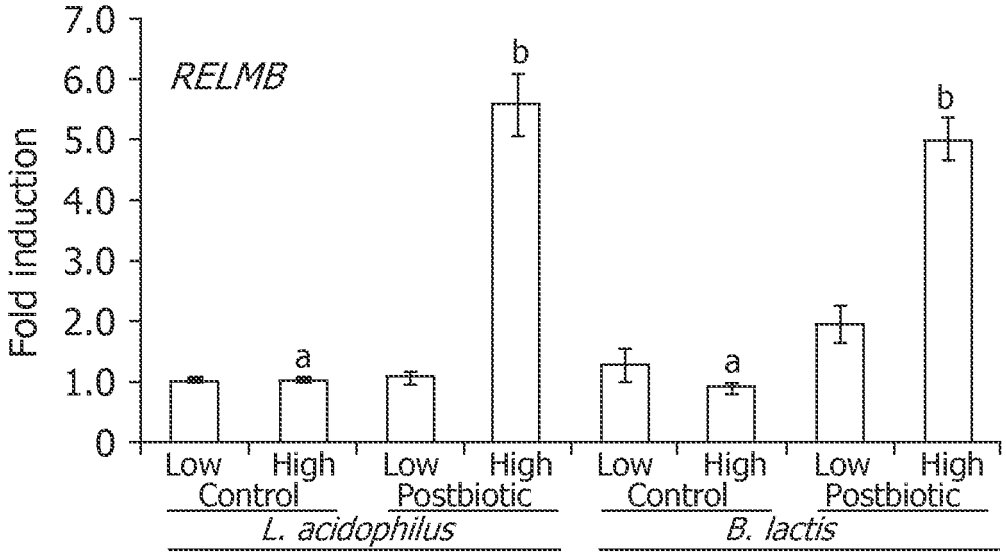


FIG. 4D

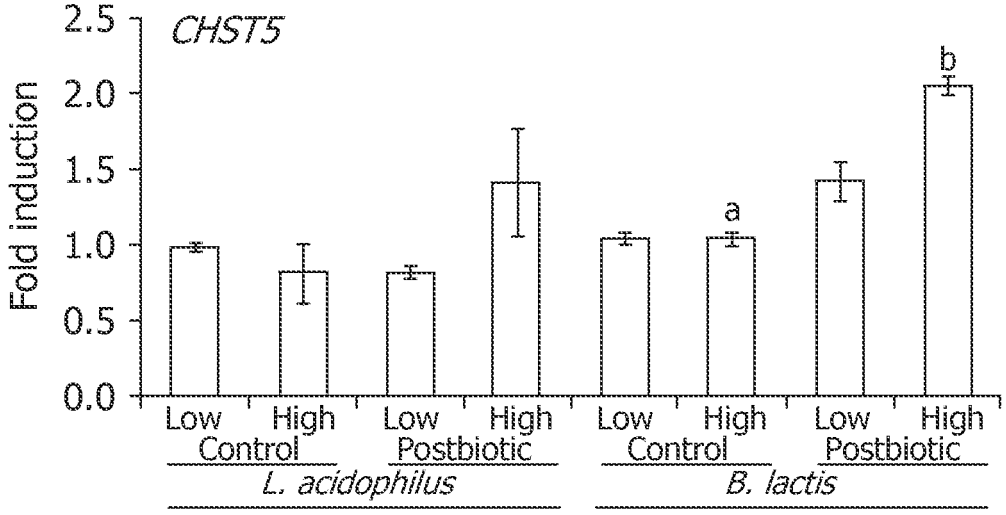
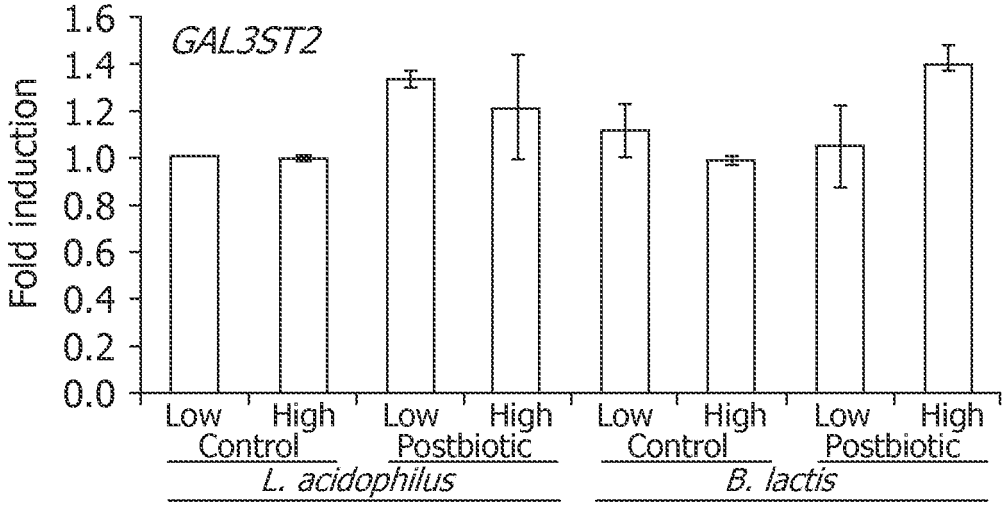

CHST5
Fold induction
2.5
2.0
1.5
1.0
0.5
0.0
a
b
Low
High
Low
High
Low
High
Low
High
Control
Postbiotic
Control
Postbiotic
L. acidophilus
B. lactis

FIG. 4E


GAL3ST2
Fold induction
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Low
High
Low
High
Low
High
Low
High
Control
Postbiotic
Control
Postbiotic
L. acidophilus
B. lactis