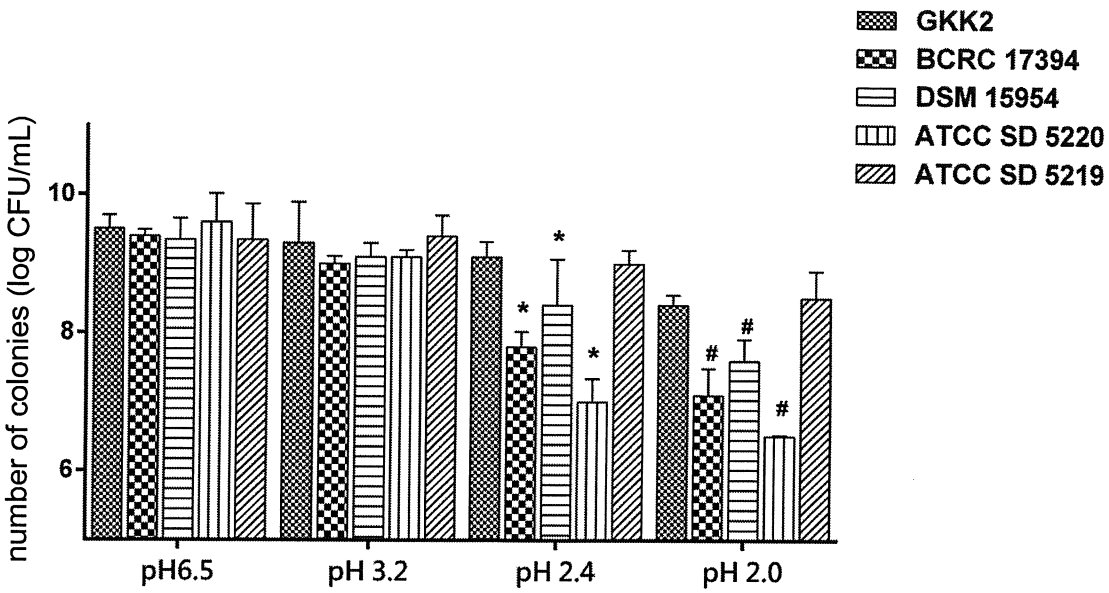

GKK2
BCRC 17394
DSM 15954
ATCC SD 5220
ATCC SD 5219
number of colonies (log CFU/mL)
10
8
6
pH6.5
pH 3.2
pH 2.4
pH 2.0

Fig. 1

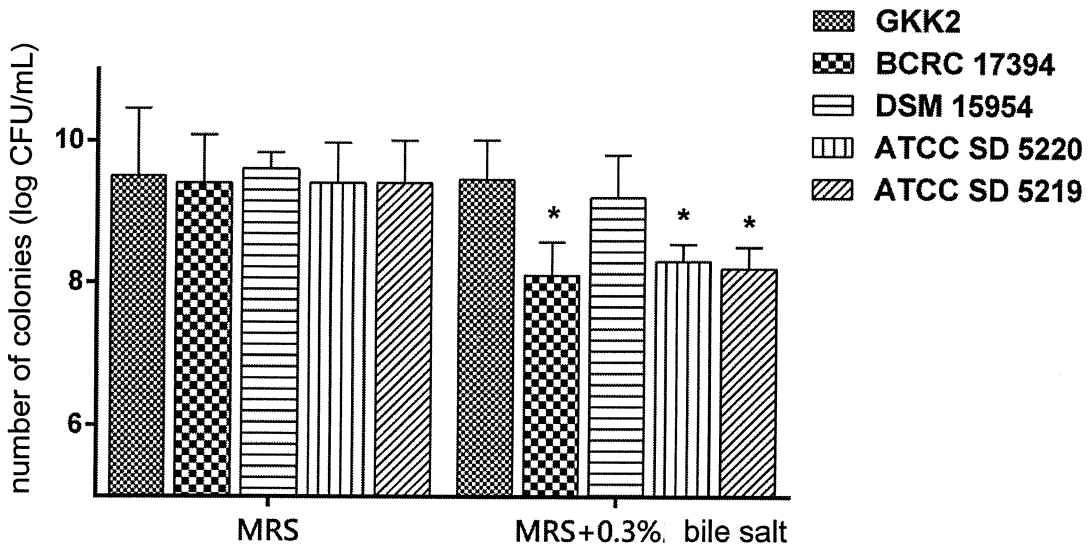

GKK2
BCRC 17394
DSM 15954
ATCC SD 5220
ATCC SD 5219
number of colonies (log CFU/mL)
10
8
6
MRS
MRS+0.3%. bile salt

Fig. 2

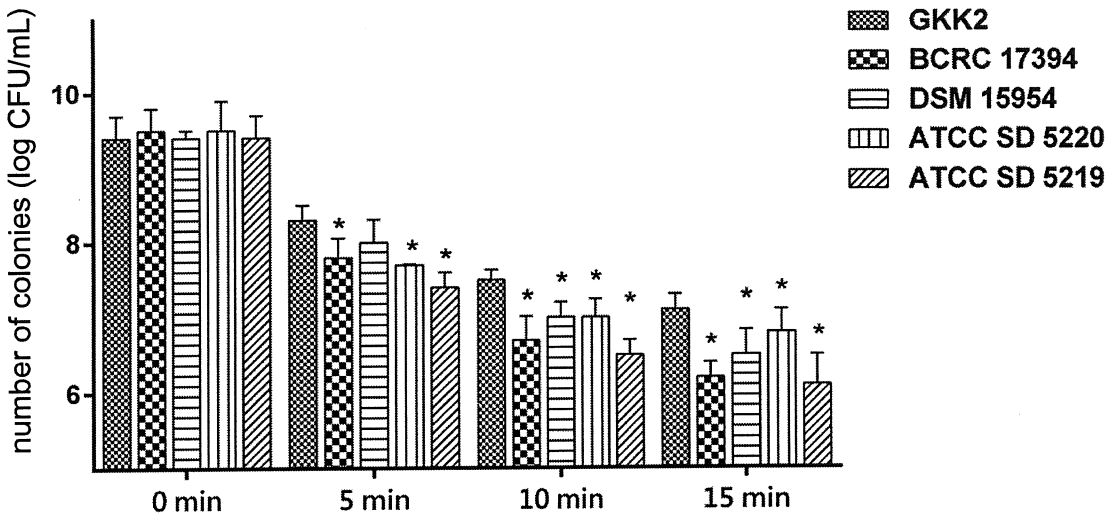

number of colonies (log CFU/mL)
10
8
6
0 min
5 min
10 min
15 min
GKK2
BCRC 17394
DSM 15954
ATCC SD 5220
ATCC SD 5219

Fig. 3

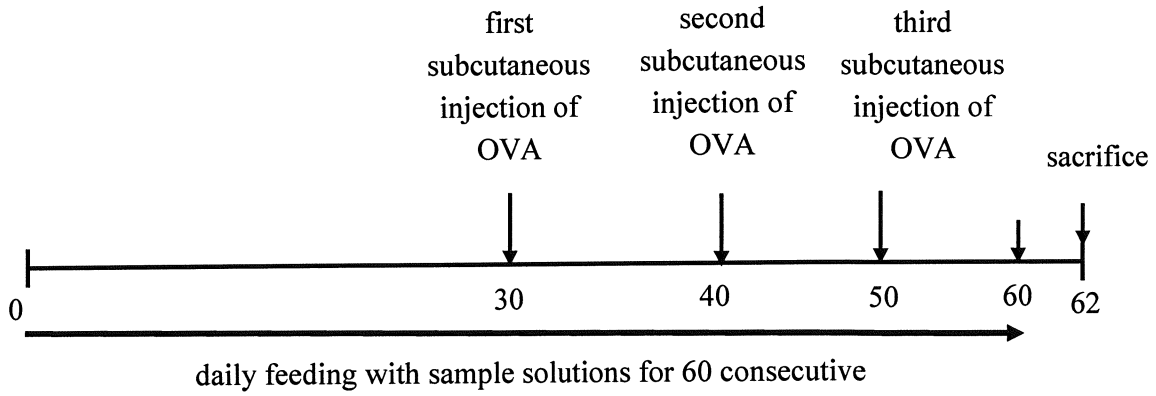

first subcutaneous injection of OVA
second subcutaneous injection of OVA
third subcutaneous injection of OVA
sacrifice
0
30
40
50
60
62
daily feeding with sample solutions for 60 consecutive

Fig. 4

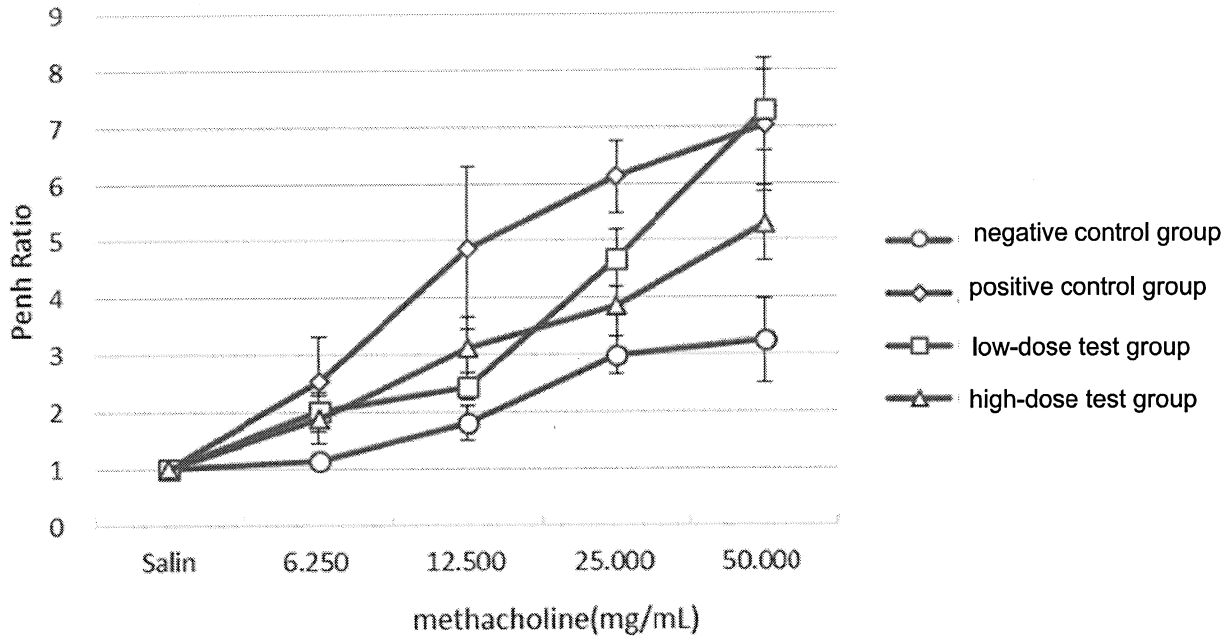

Penh Ratio
9
8
7
6
5
4
3
2
1
0
Salin
6.250
12.500
25.000
50.000
methacholine(mg/mL)
negative control group
positive control group
low-dose test group
high-dose test group

Fig. 5

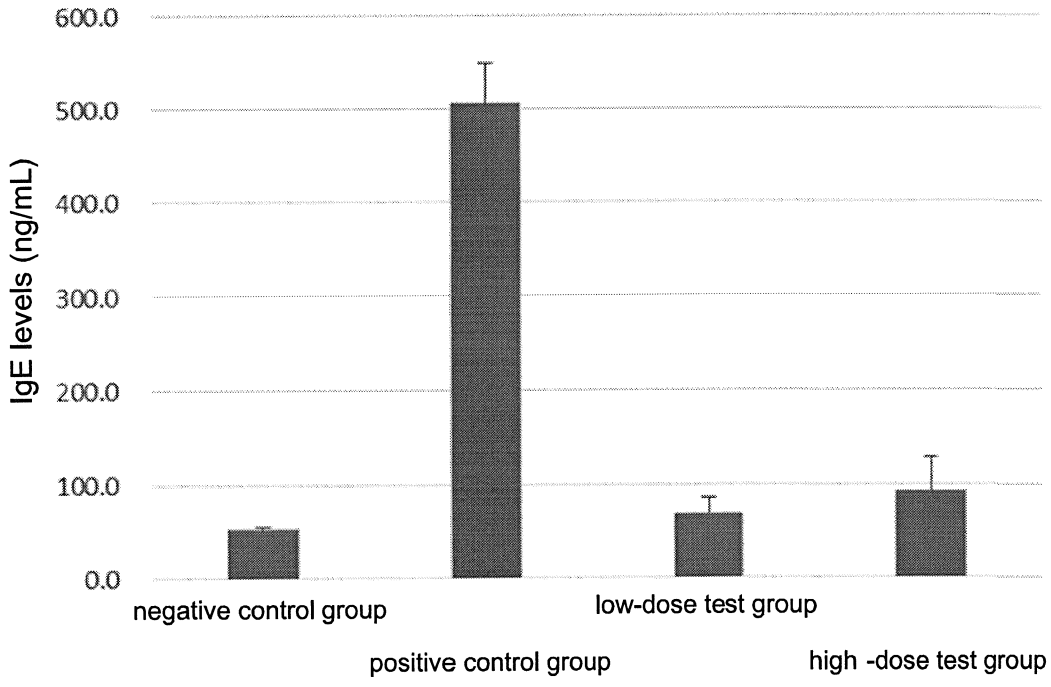

IgE levels (ng/mL)
600.0
500.0
400.0
300.0
200.0
100.0
0.0
negative control group
positive control group
low-dose test group
high -dose test group

Fig. 6

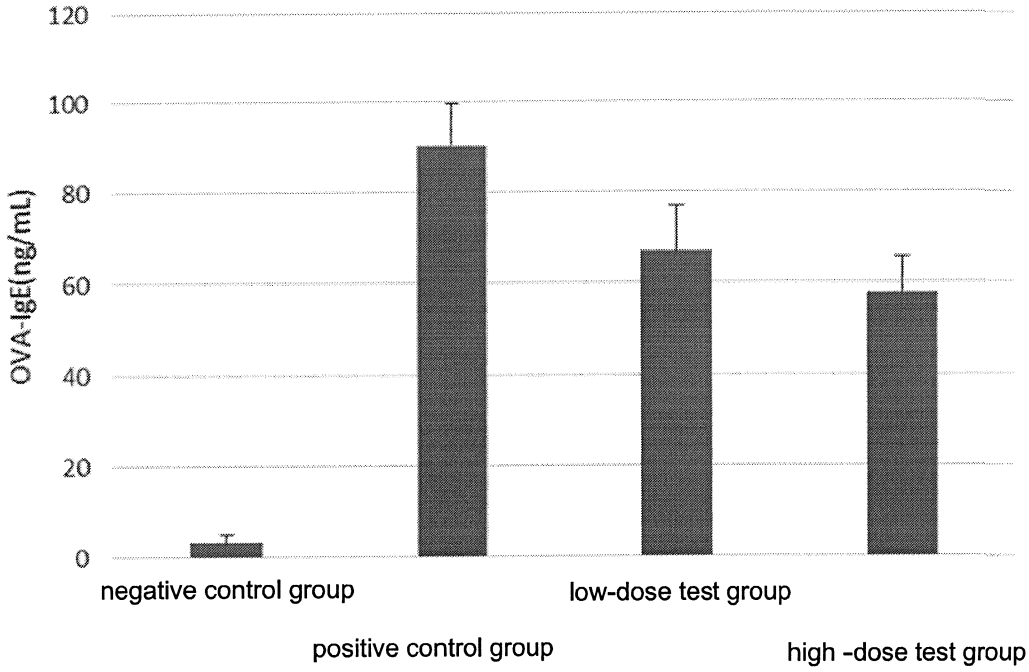

120
100
80
60
40
20
0
OVA-IgE(ng/mL)
negative control group
positive control group
low-dose test group
high -dose test group

Fig. 7

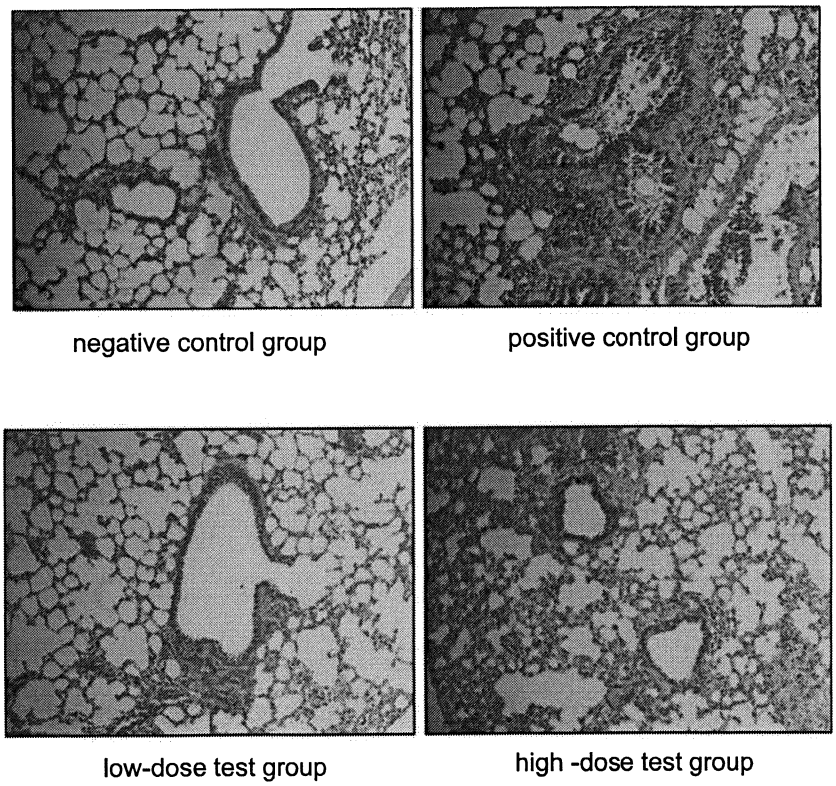

negative control group
positive control group
low-dose test group
high -dose test group

Fig. 8

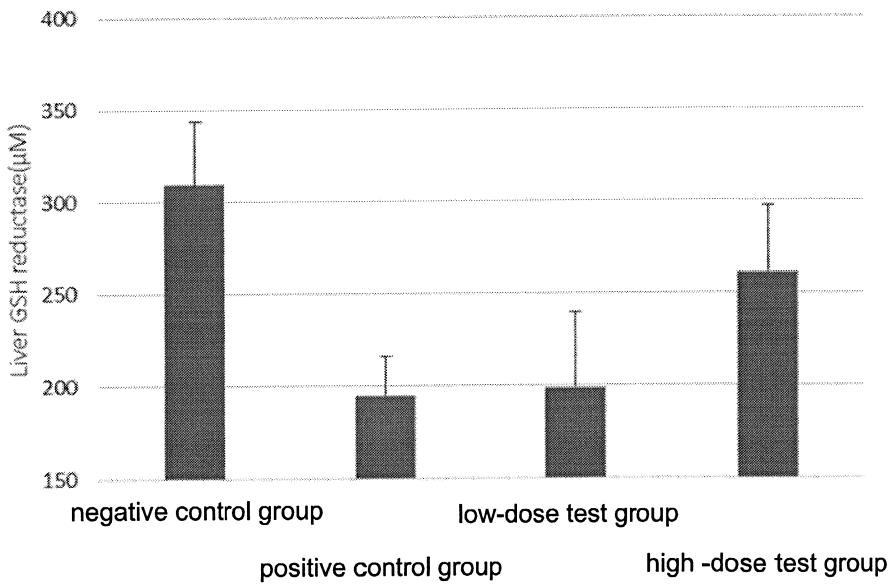

400
350
300
250
200
150
Liver GSH reductase(μM)
negative control group
positive control group
low-dose test group
high -dose test group

Fig. 9