Drawings:

FIG. 1

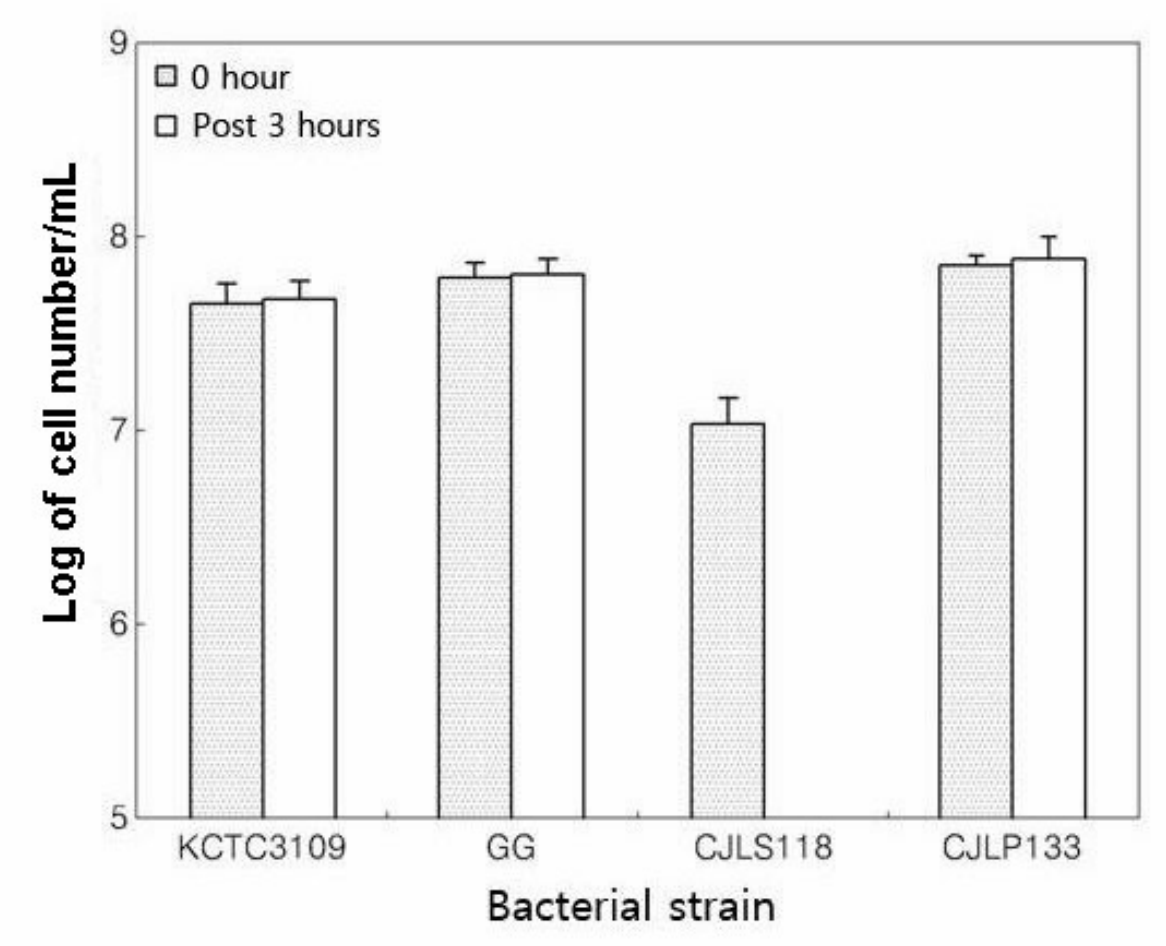


FIG. 2

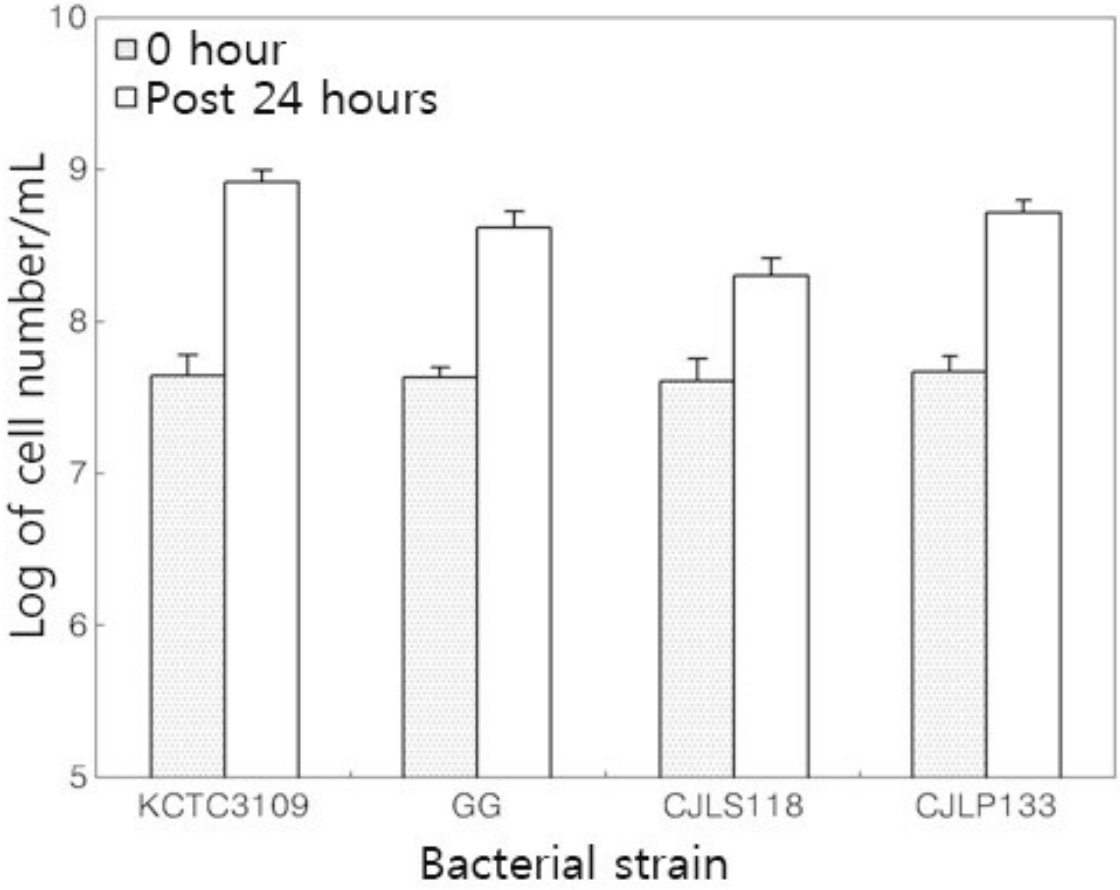

0 hour
Post 24 hours
Log of cell number/mL
10
9
8
7
6
5
KCTC3109
GG
CJLS118
CJLP133
Bacterial strain

FIG. 3

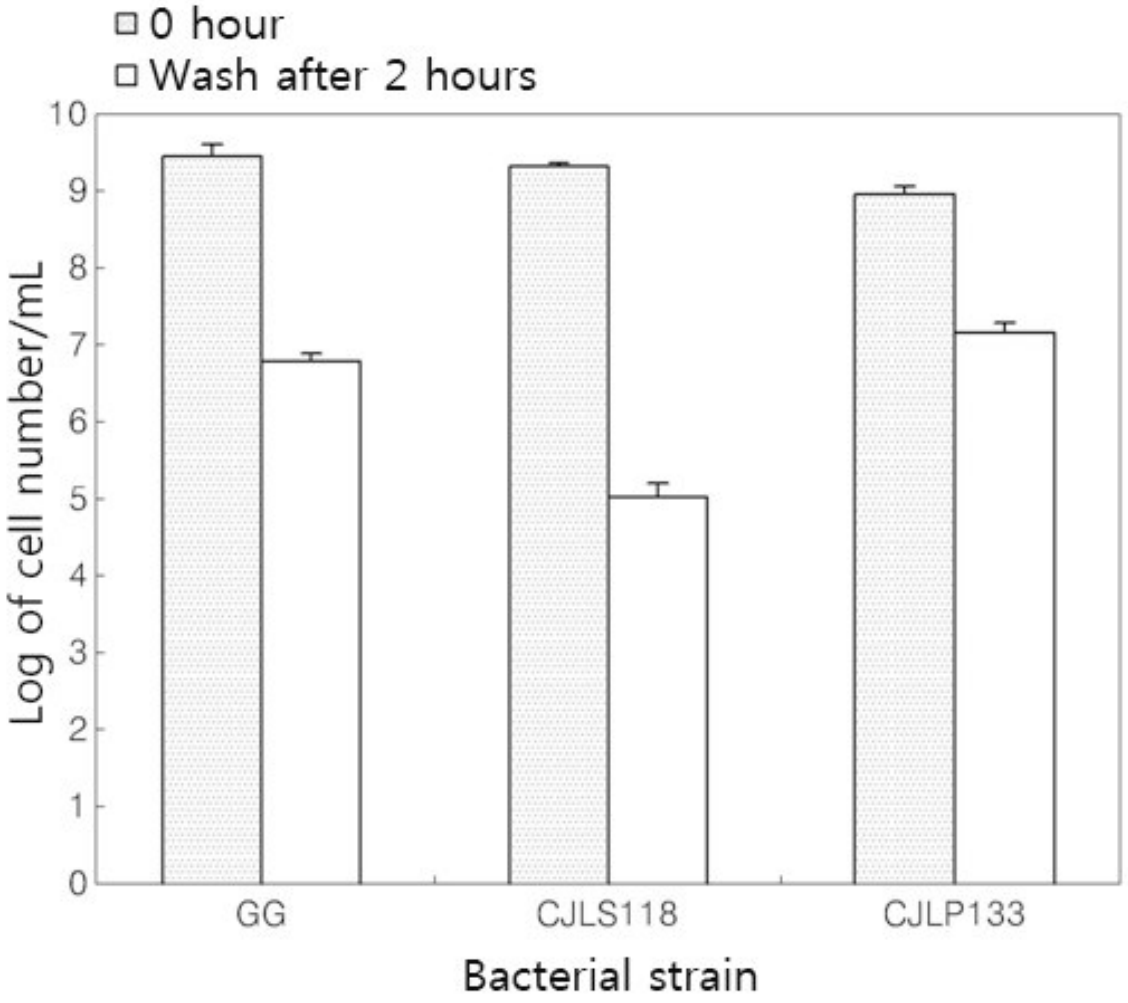

0 hour
Wash after 2 hours
Log of cell number/mL
10
9
8
7
6
5
4
3
2
1
0
GG
CJLS118
CJLP133
Bacterial strain

FIG. 4

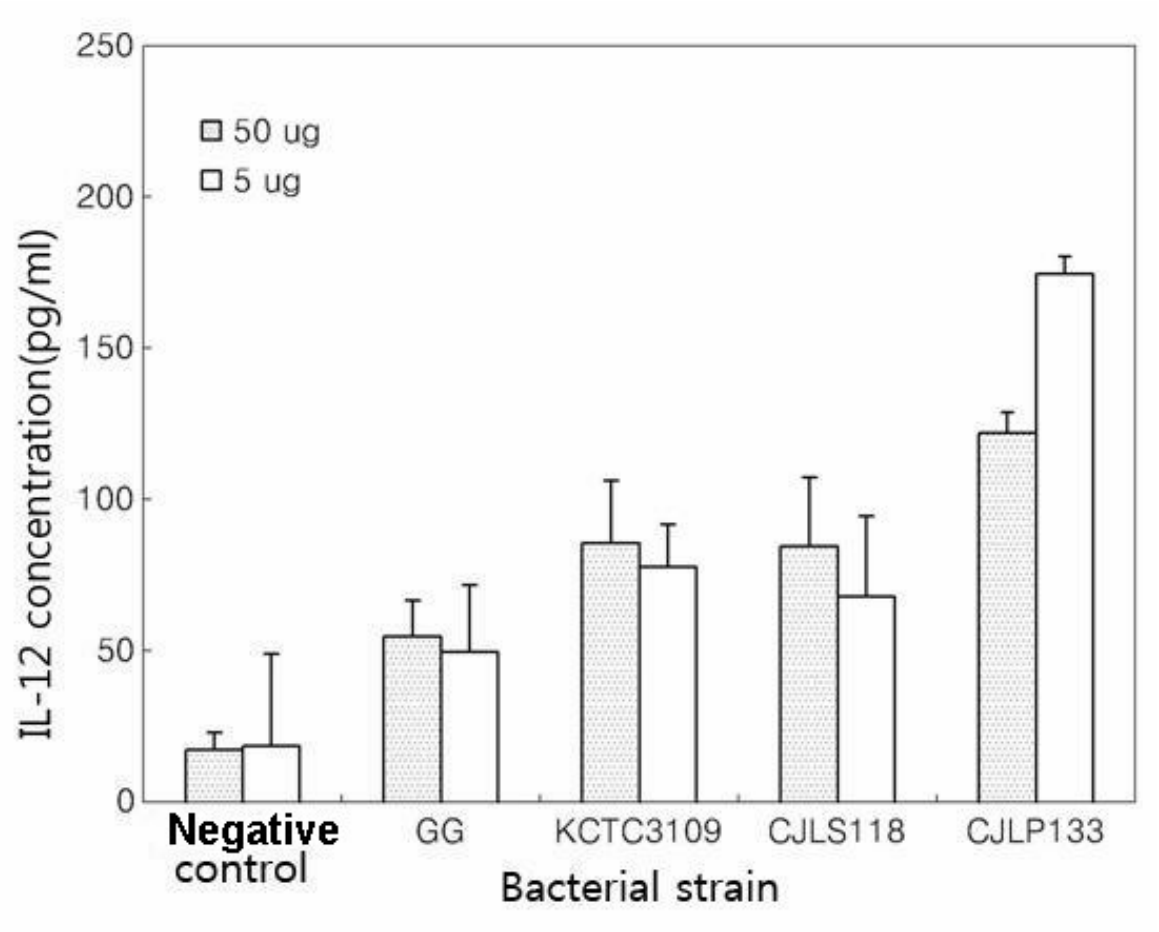

250
200
150
100
50
0
50 ug
5 ug
IL-12 concentration(pg/ml)
Negative control
GG
KCTC3109
CJLS118
CJLP133
Bacterial strain

FIG. 5

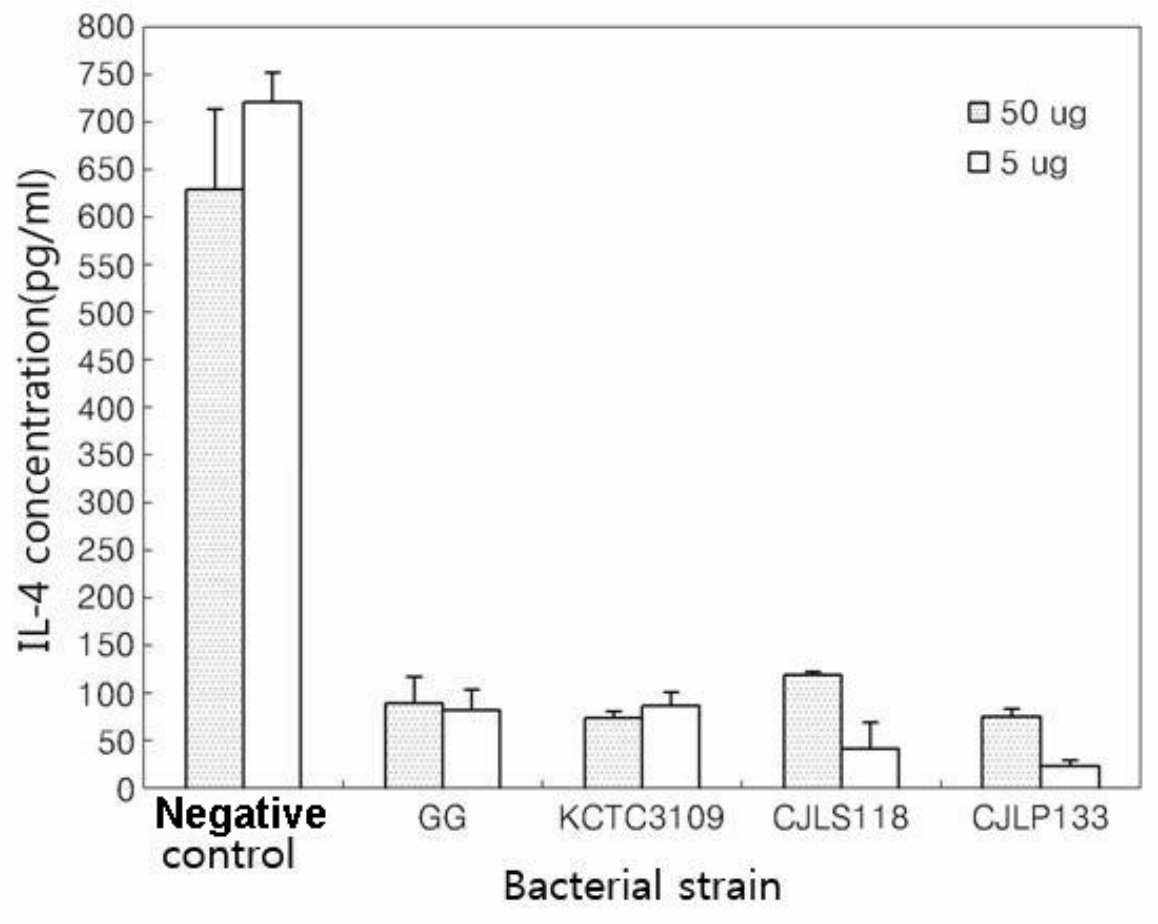

800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
IL-4 concentration(pg/ml)
50 ug
5 ug
Negative control
GG
KCTC3109
CJLS118
CJLP133
Bacterial strain

FIG. 6

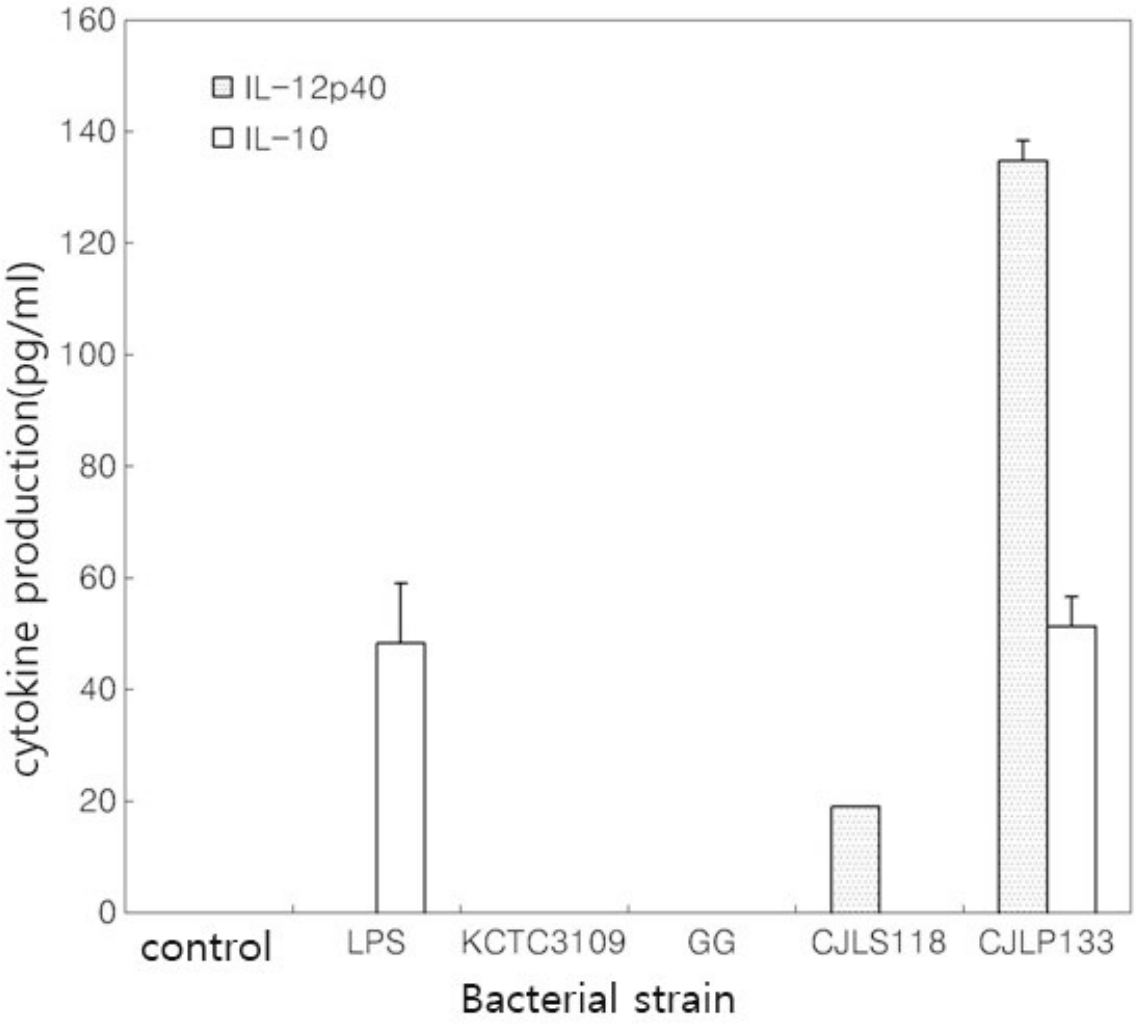

IL-12p40
IL-10
cytokine production(pg/ml)
160
140
120
100
80
60
40
20
0
control
LPS
KCTC3109
GG
CJLS118
CJLP133
Bacterial strain

FIG. 7

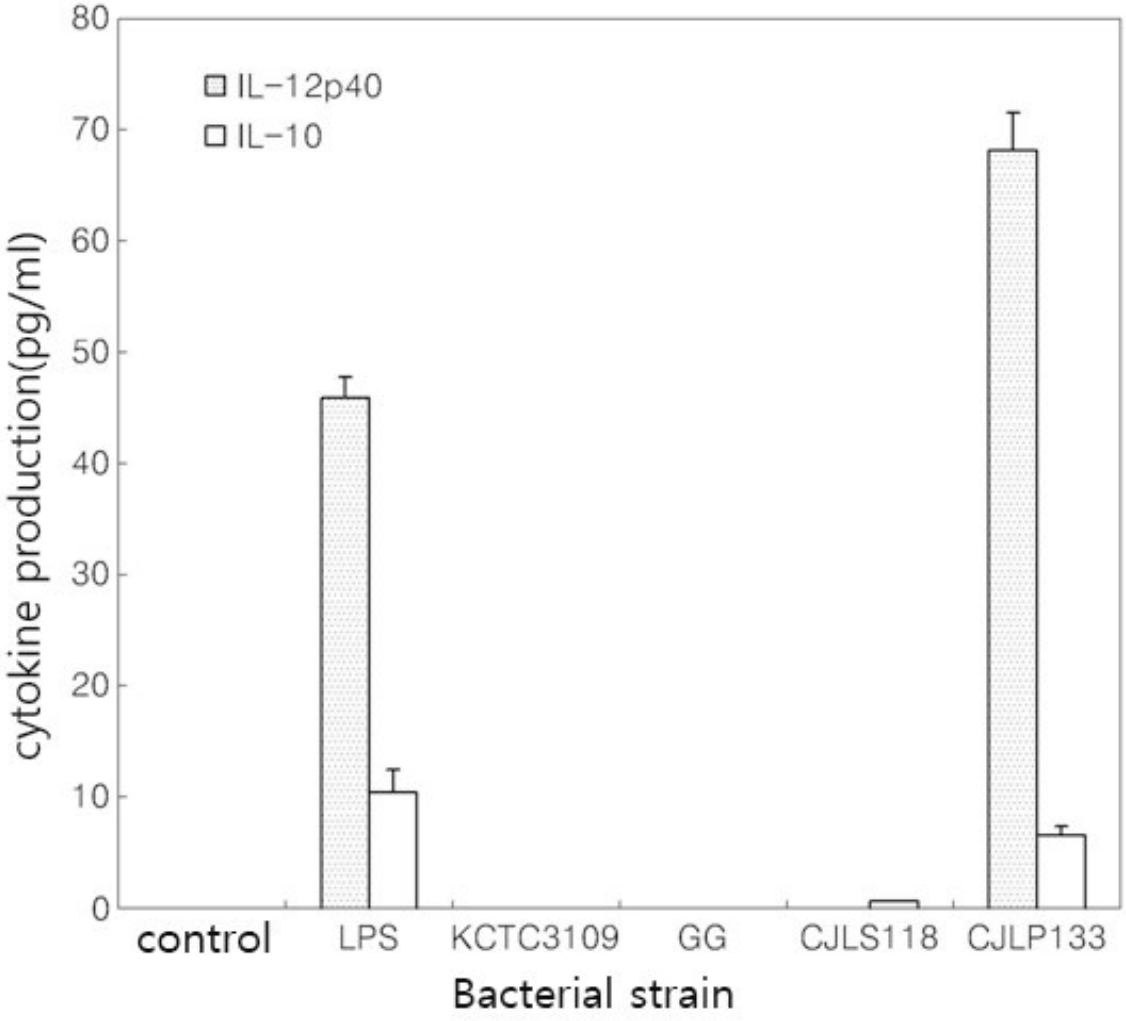

IL-12p40
IL-10
cytokine production(pg/ml)
0
10
20
30
40
50
60
70
80
control
LPS
KCTC3109
GG
CJLS118
CJLP133
Bacterial strain

FIG. 8

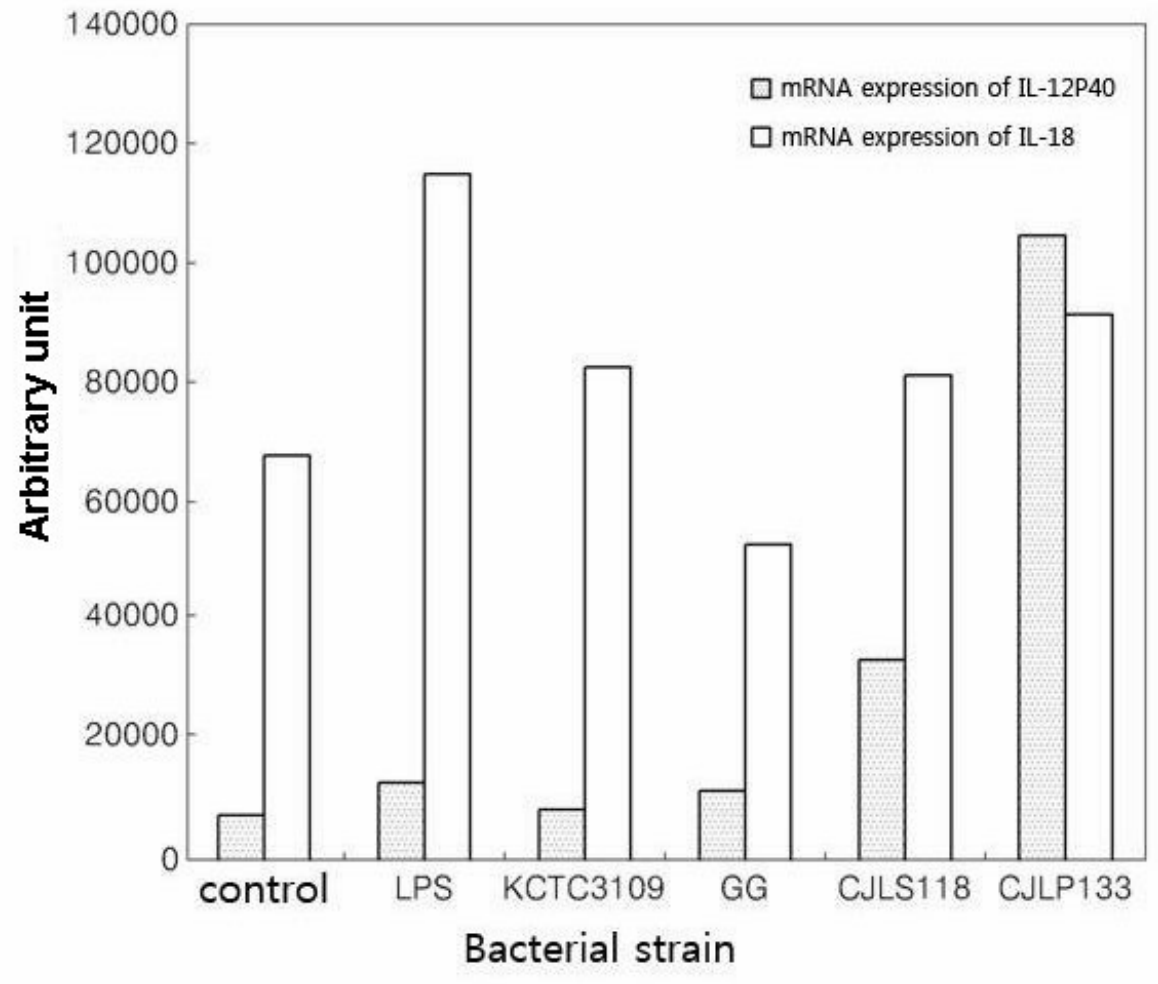

140000
120000
100000
80000
60000
40000
20000
0
Arbitrary unit
mRNA expression of IL-12P40
mRNA expression of IL-18
control
LPS
KCTC3109
GG
CJLS118
CJLP133
Bacterial strain

FIG. 9

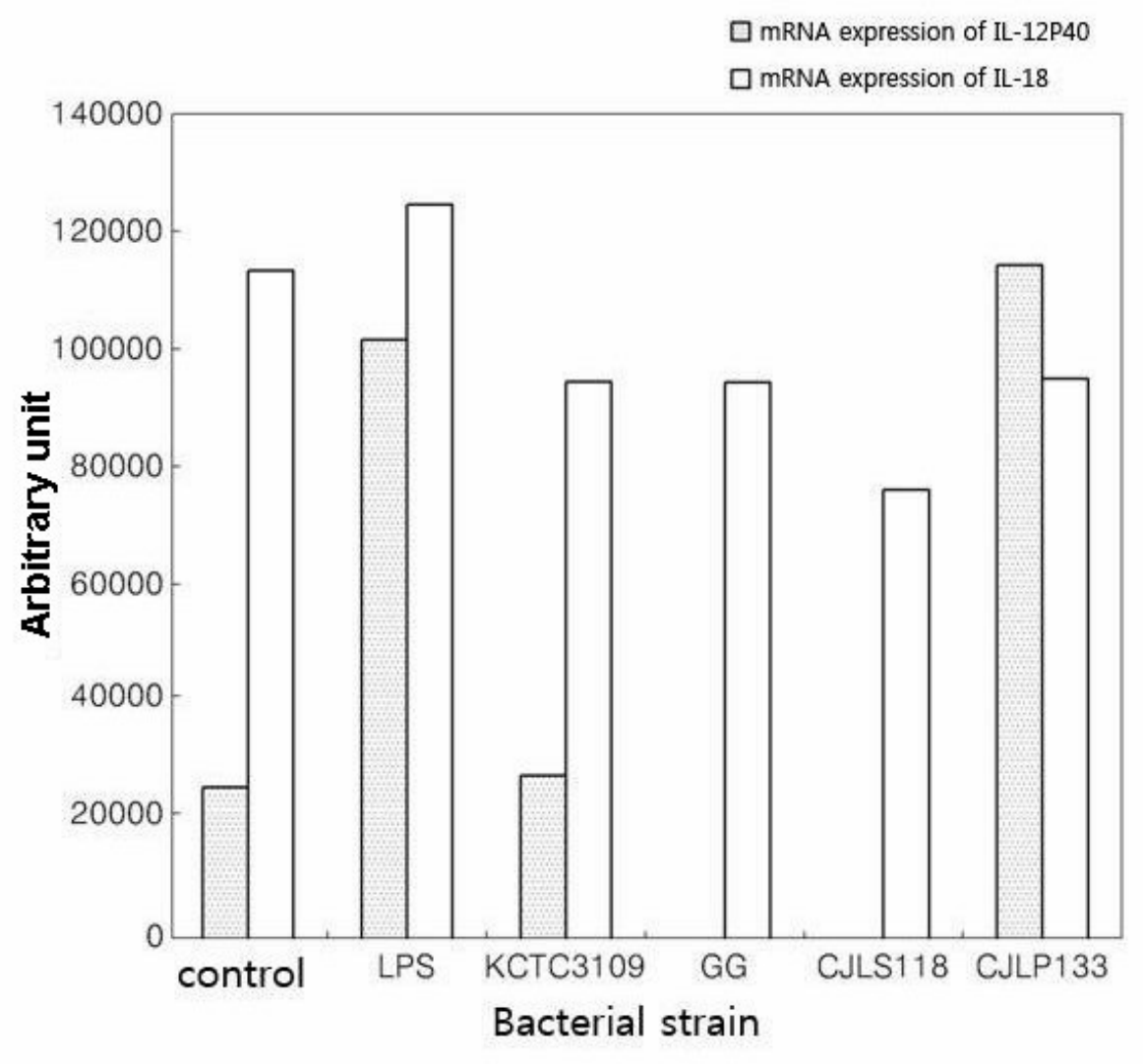

mRNA expression of IL-12P40
mRNA expression of IL-18
140000
120000
100000
80000
60000
40000
20000
0
Arbitrary unit
control
LPS
KCTC3109
GG
CJLS118
CJLP133
Bacterial strain

FIG. 10a

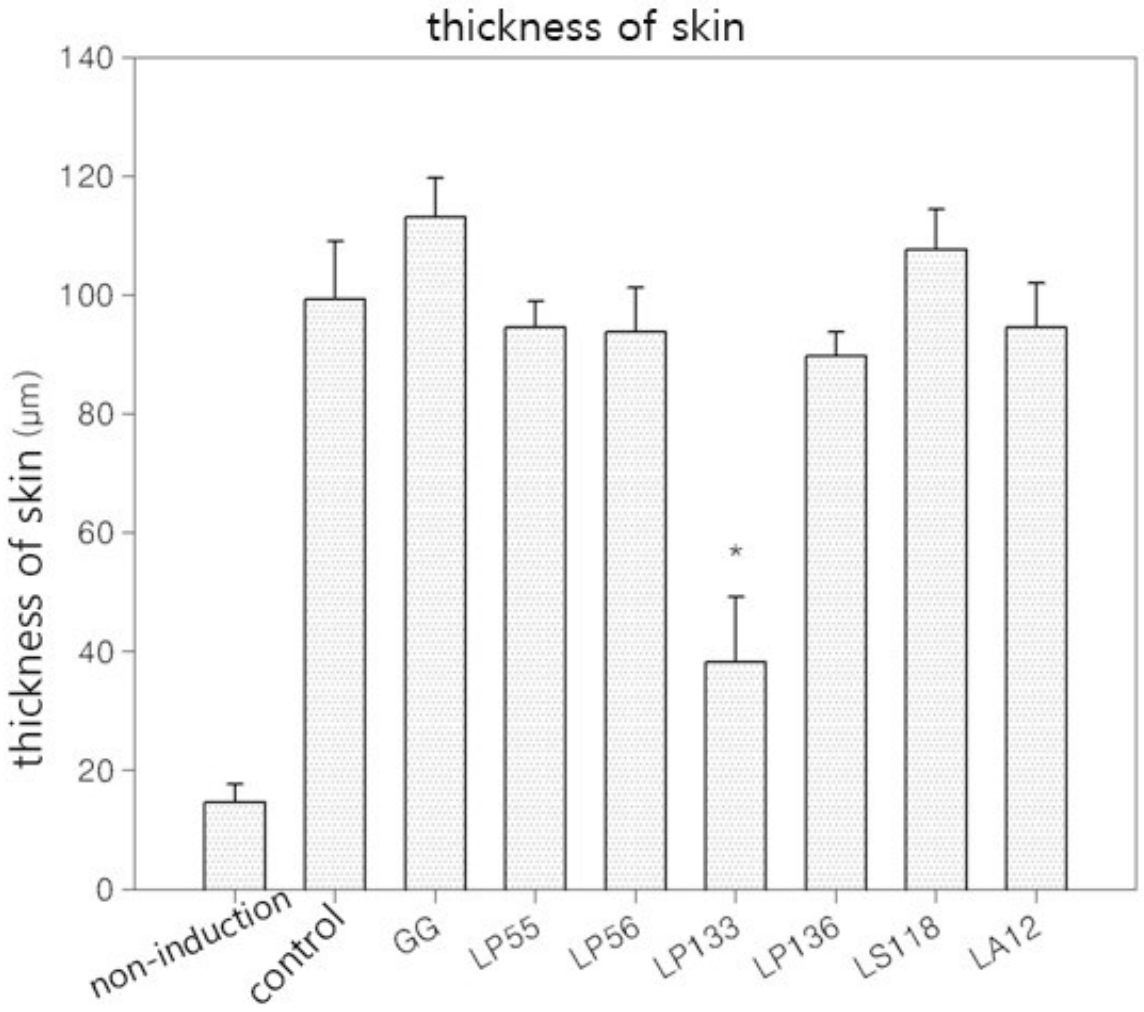

thickness of skin
thickness of skin (μm)
140
120
100
80
60
40
20
0
*
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 10b

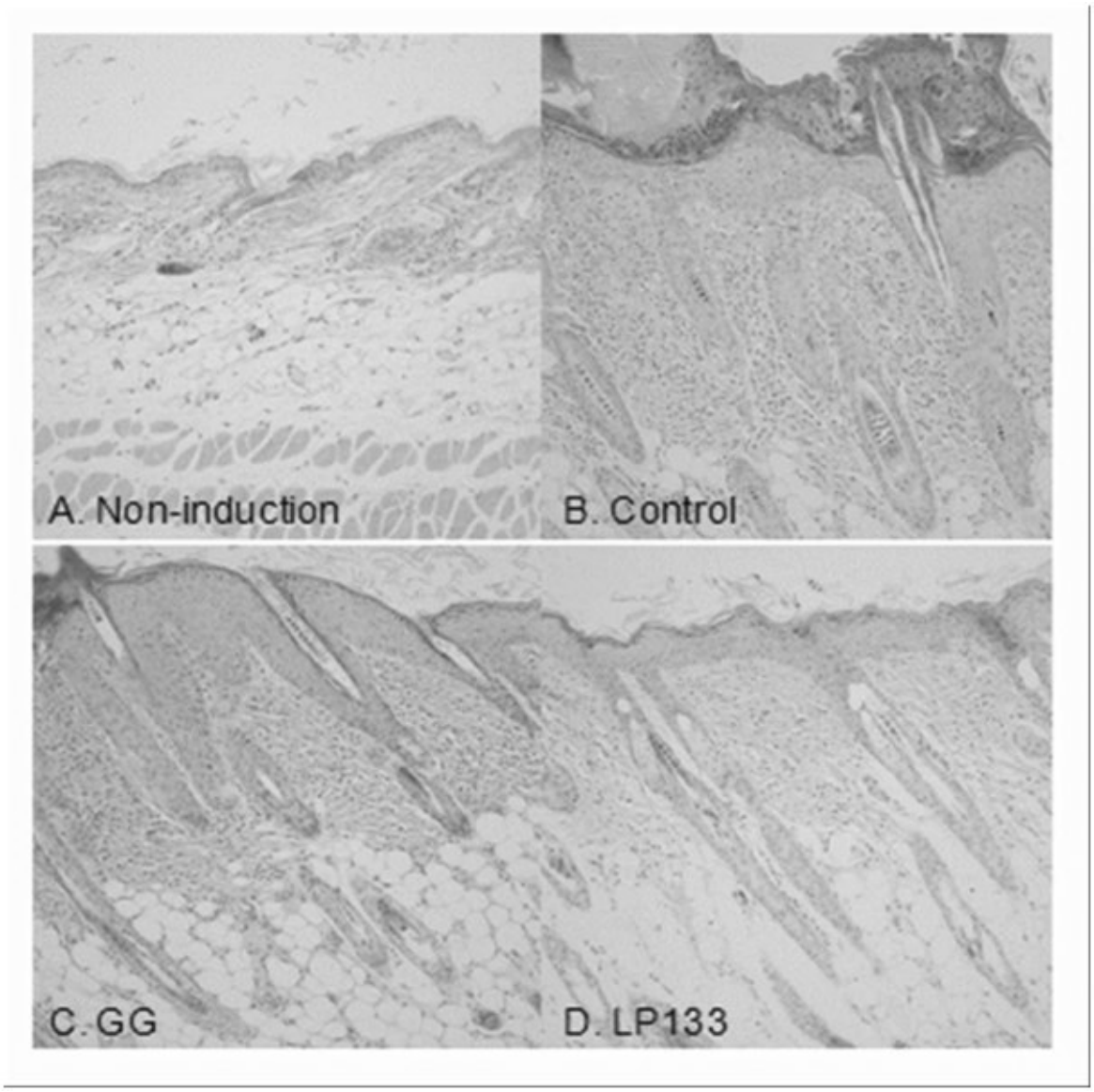


FIG. 11a

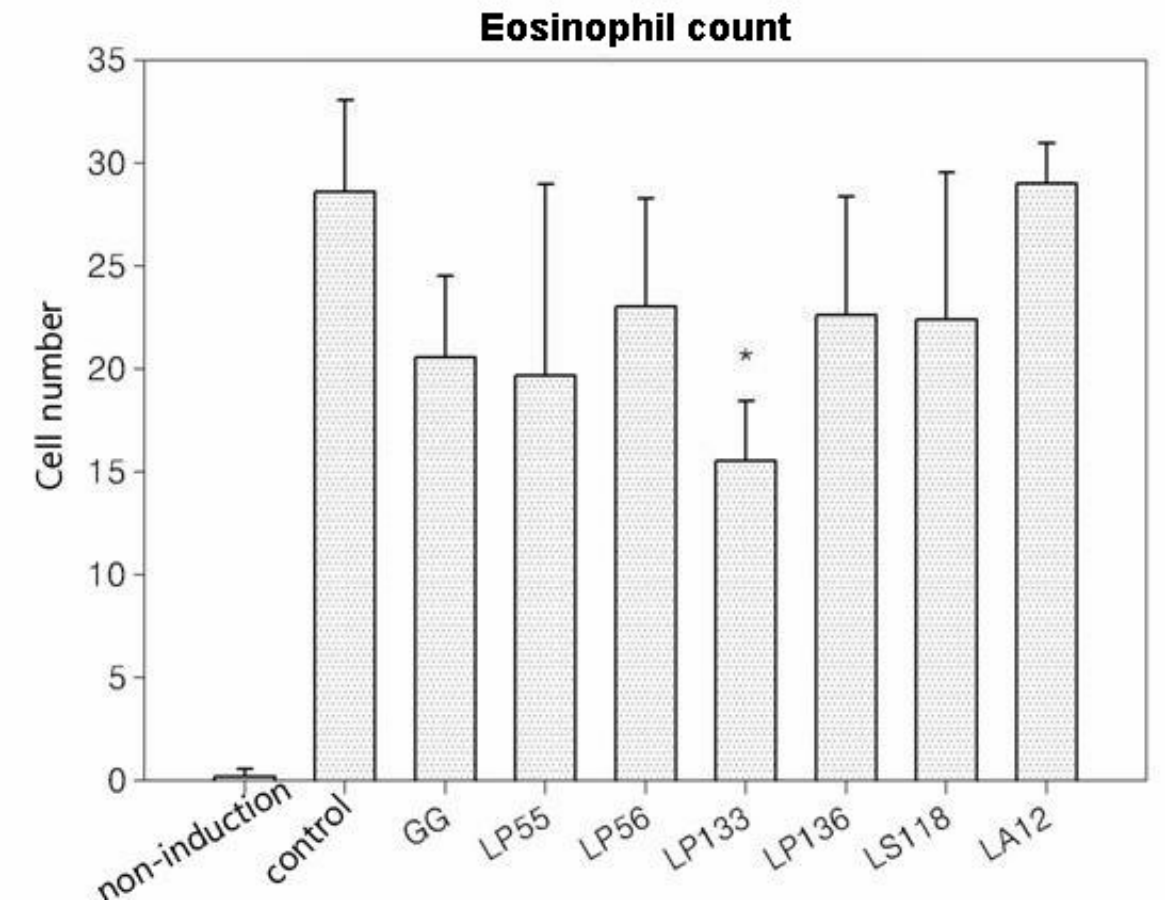

Eosinophil count
Cell number
35
30
25
20
15
10
5
0
*
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 11b

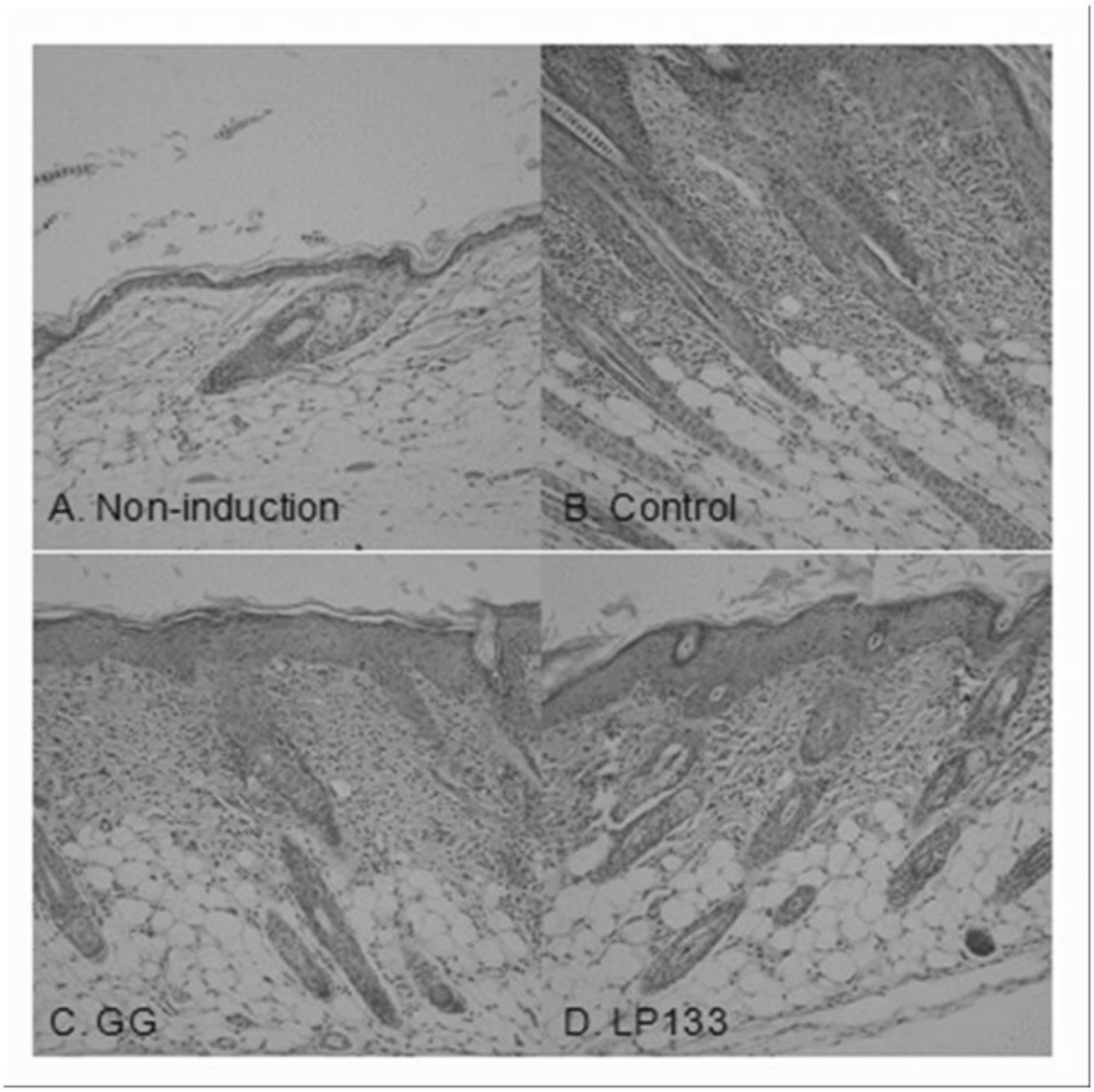


FIG. 12a

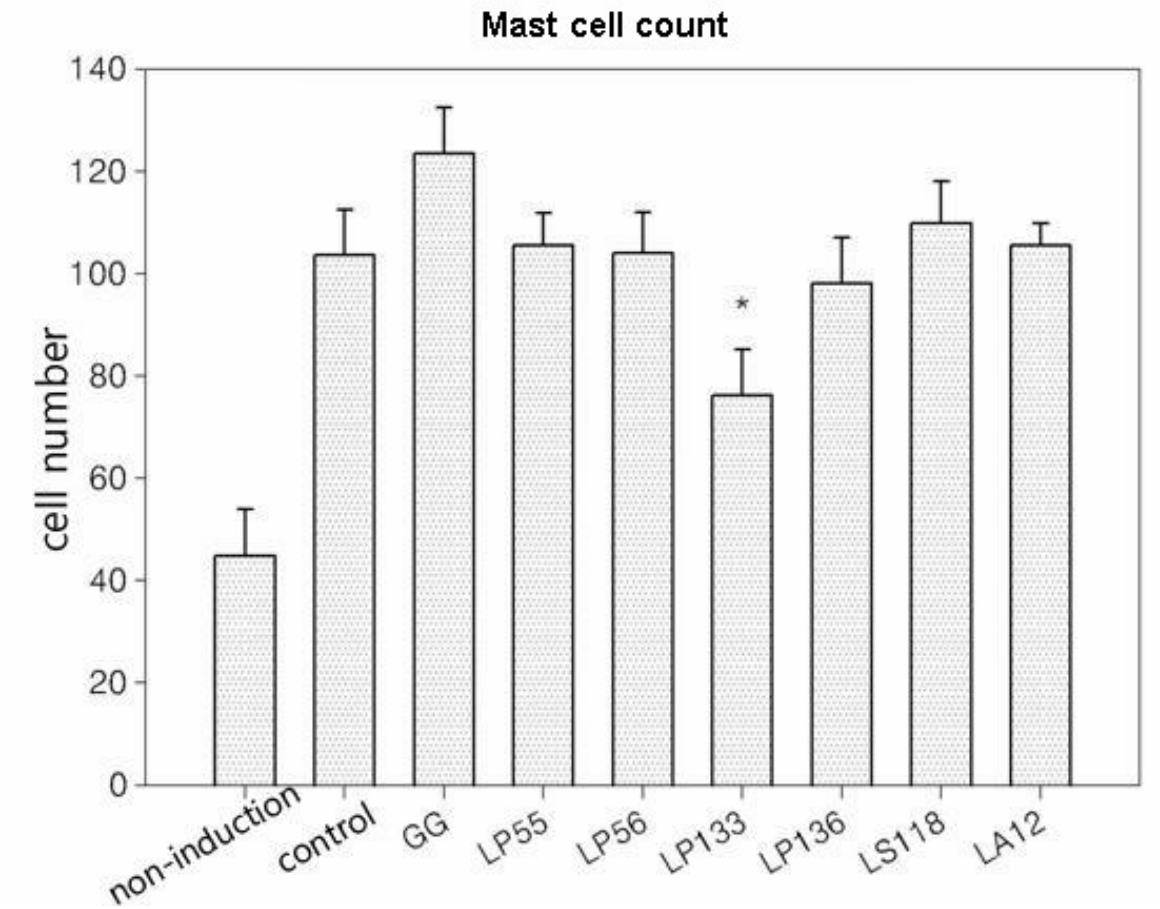

Mast cell count
cell number
140
120
100
80
60
40
20
0
*
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 12b

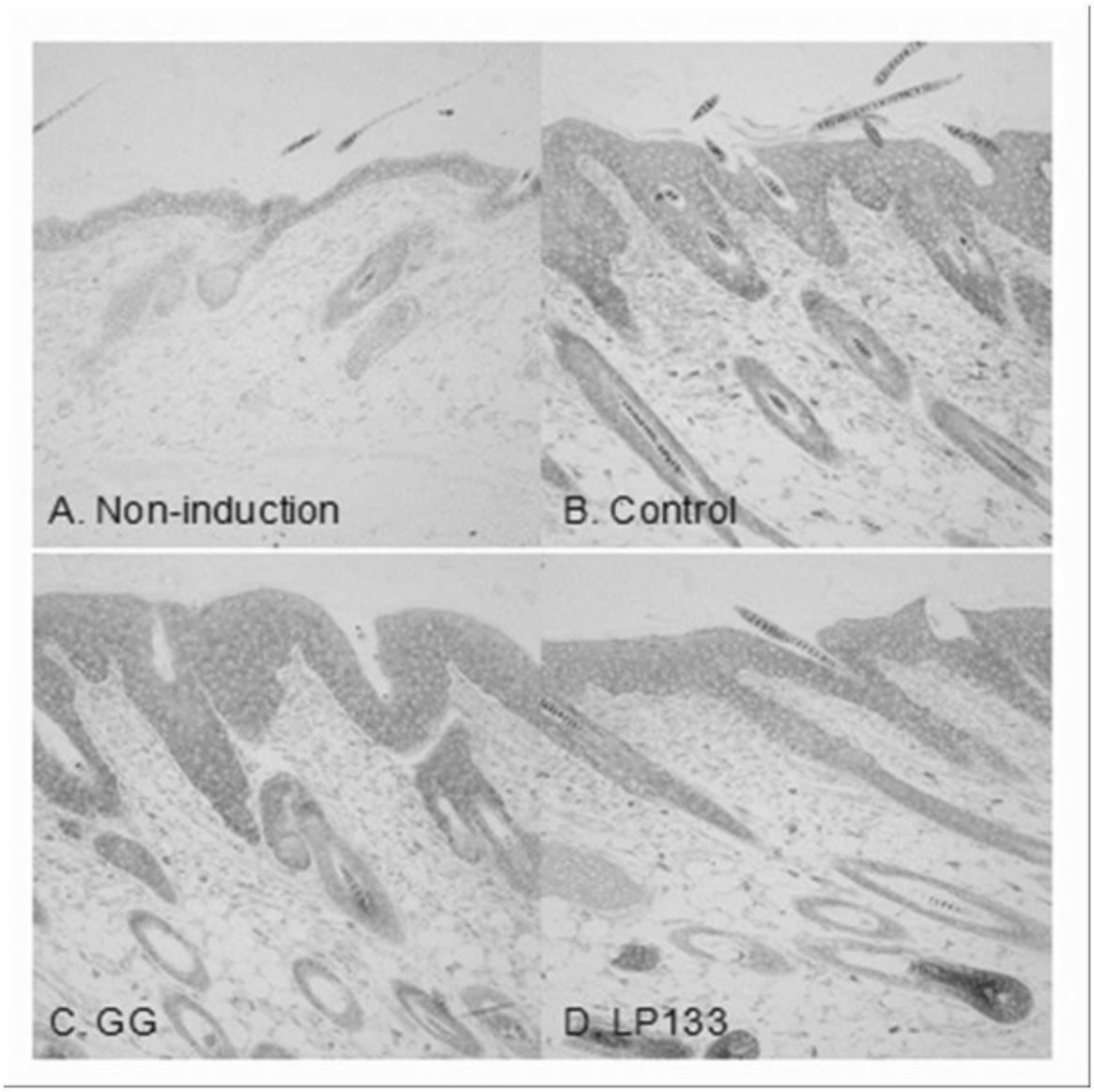


FIG. 13a

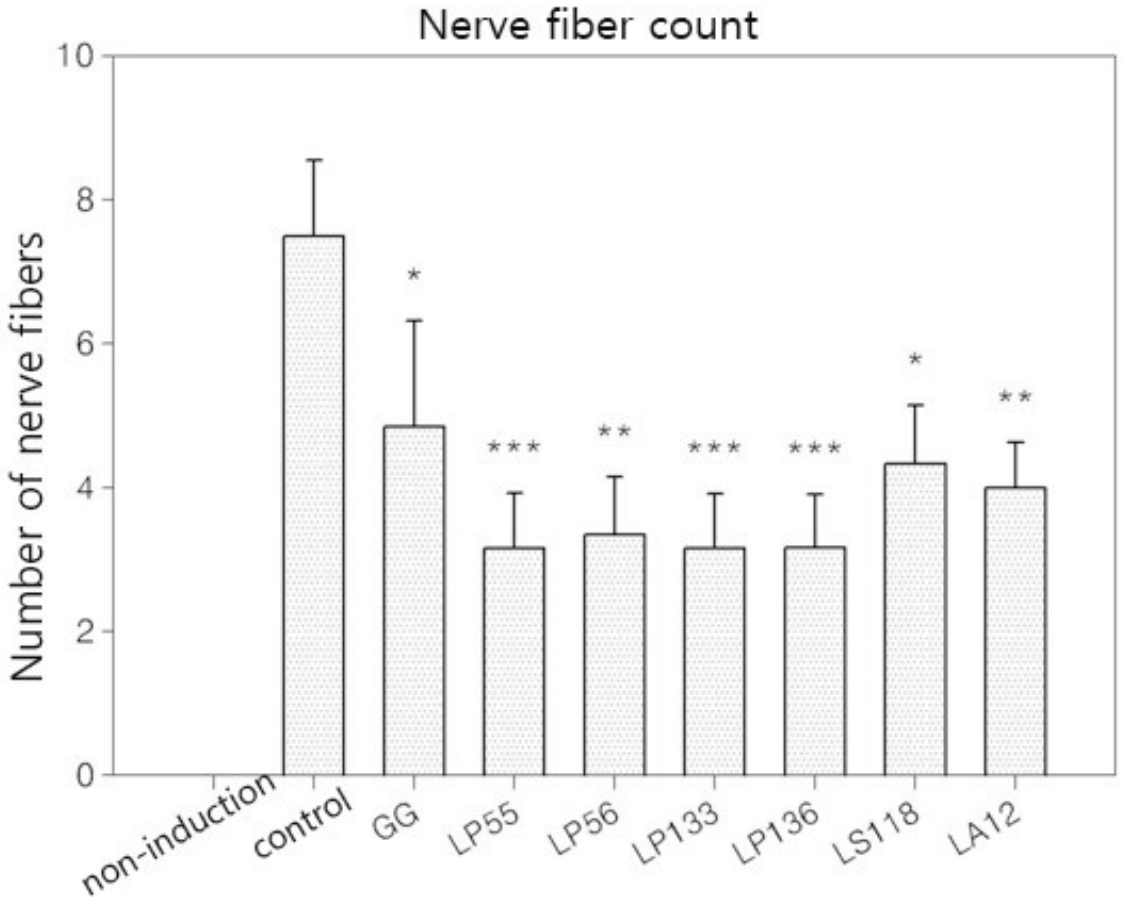

Nerve fiber count
Number of nerve fibers
10
8
6
4
2
0
*
***
**
***
***
*
**
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 13b

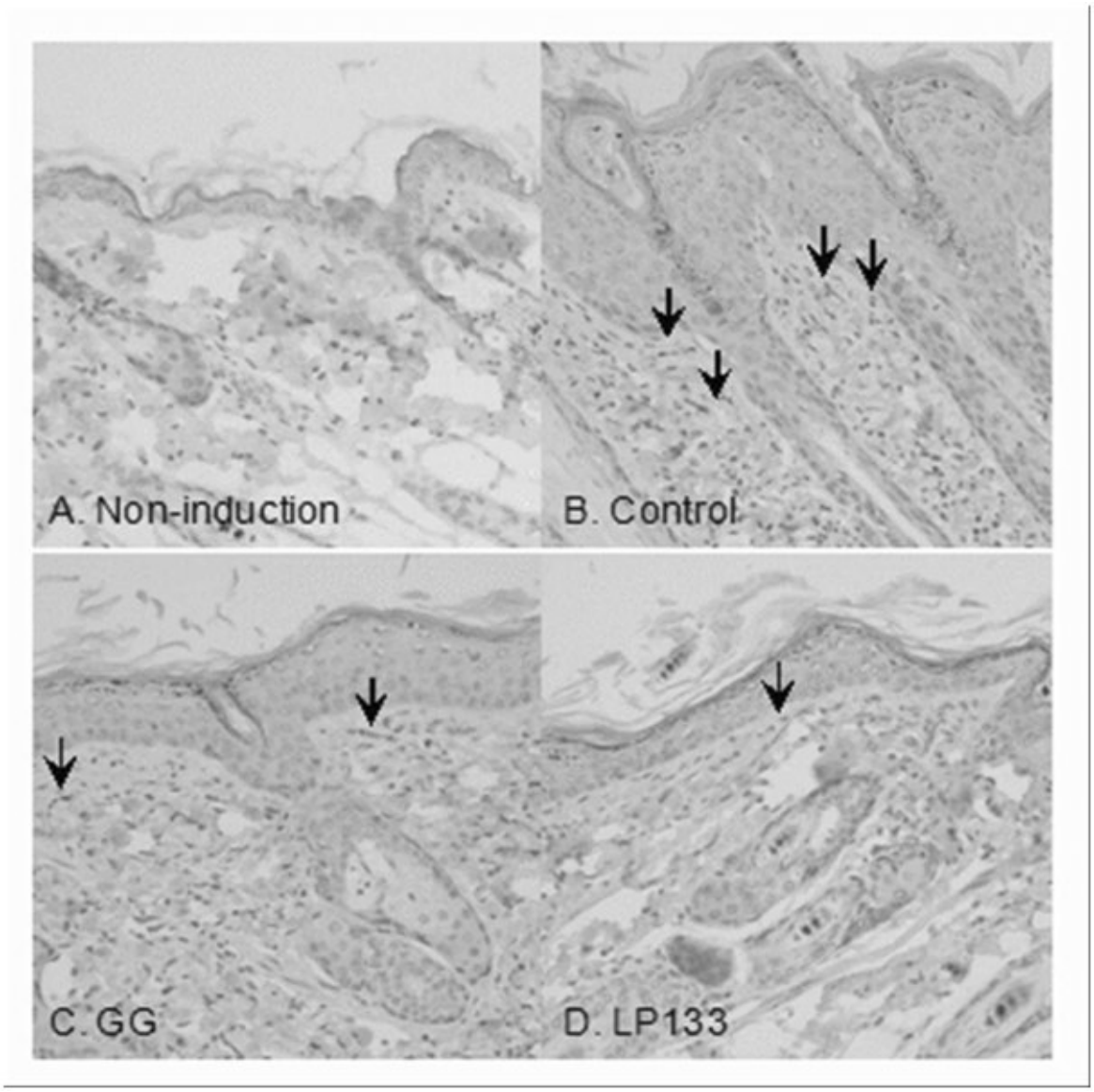


FIG. 14a

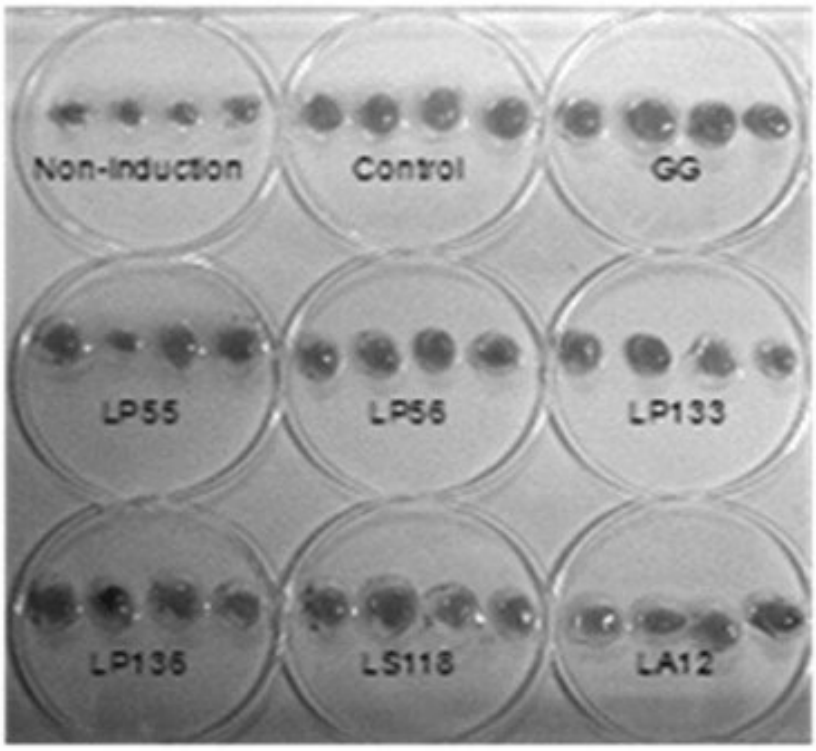


FIG. 14b

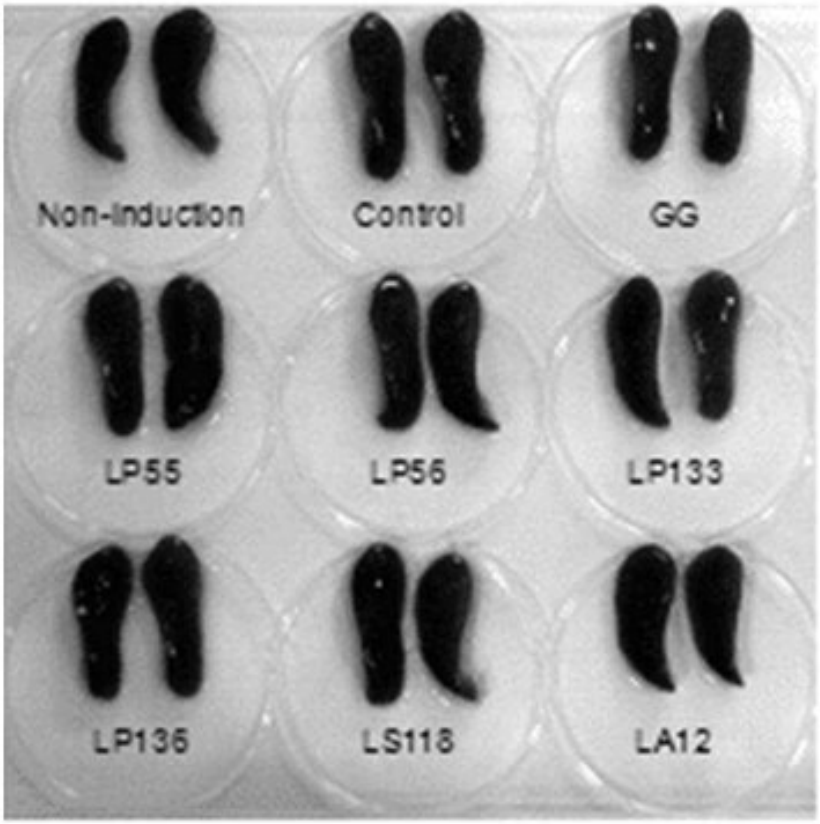


FIG. 15a

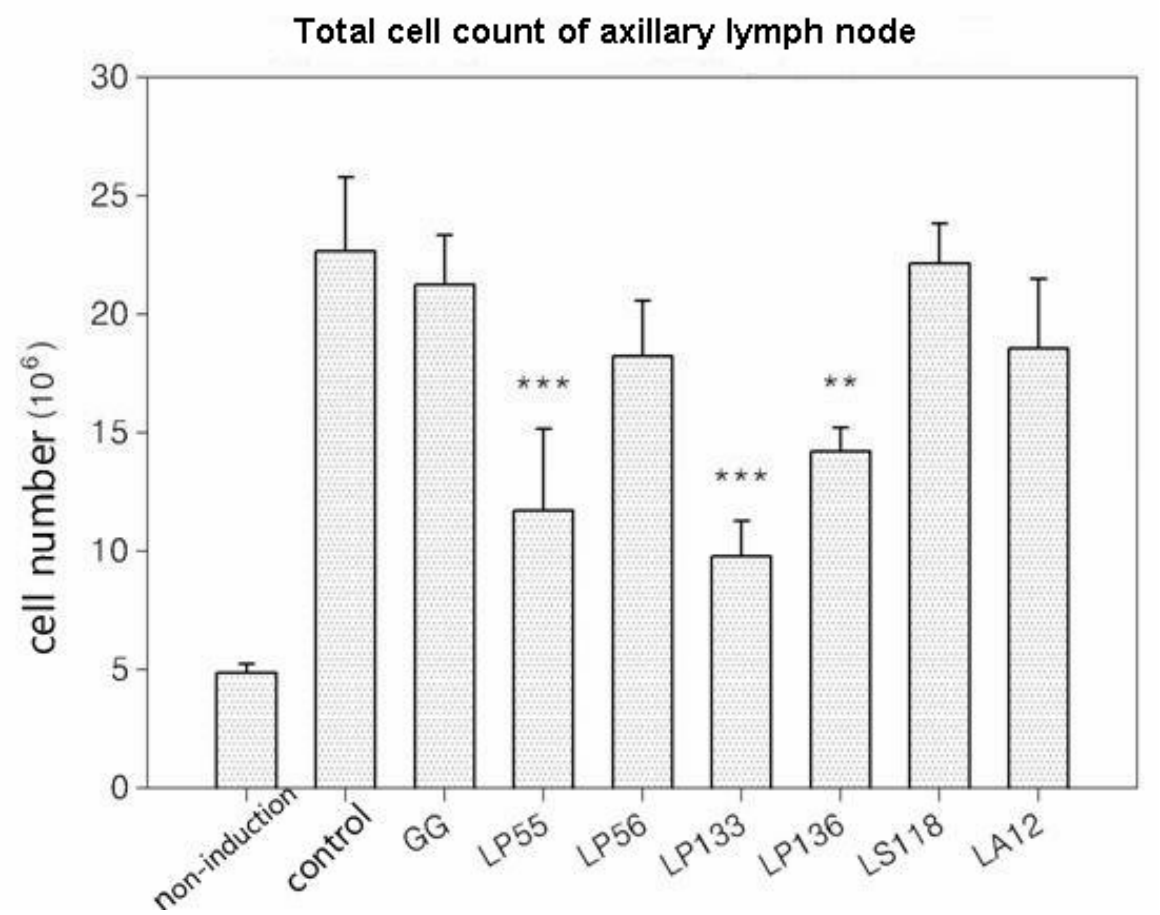

Total cell count of axillary lymph node
cell number (10^6)
30
25
20
15
10
5
0
***
***
**
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 15b

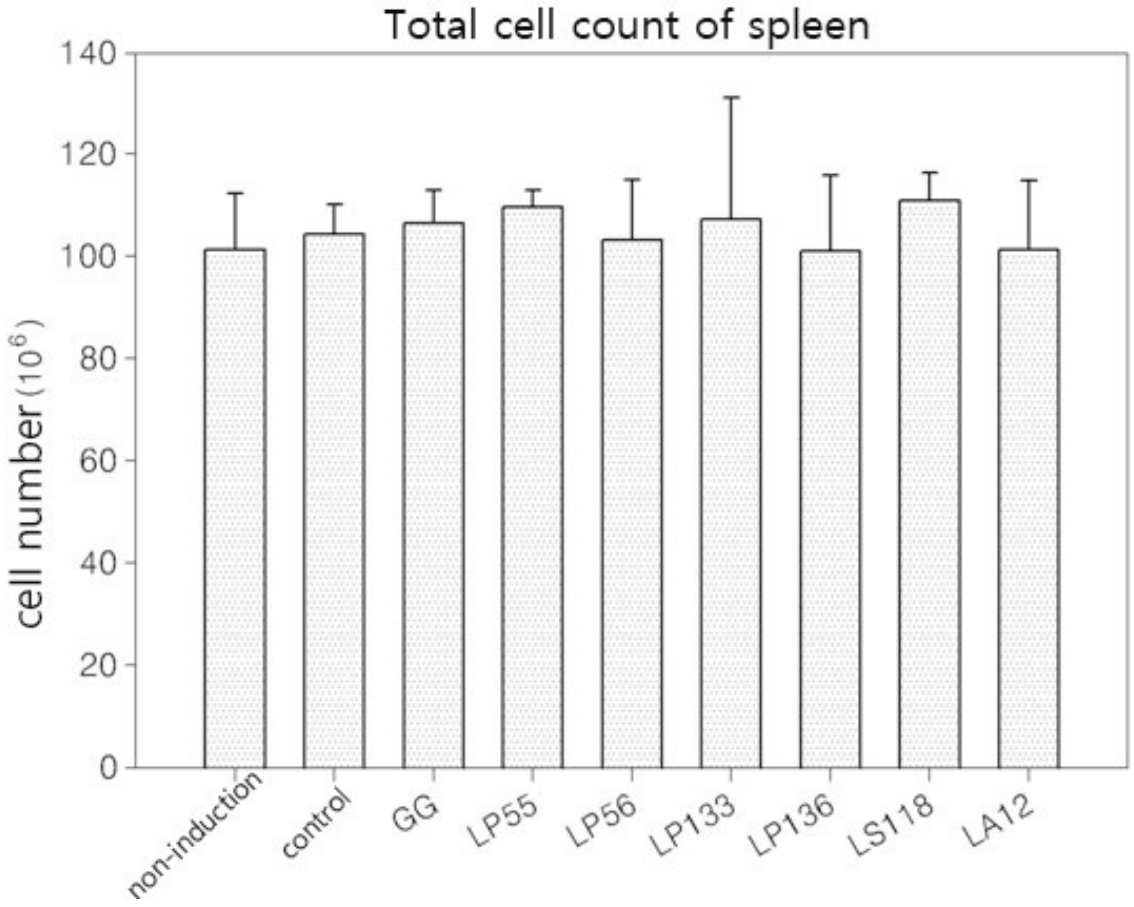

Total cell count of spleen
cell number (10^6)
140
120
100
80
60
40
20
0
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 16a

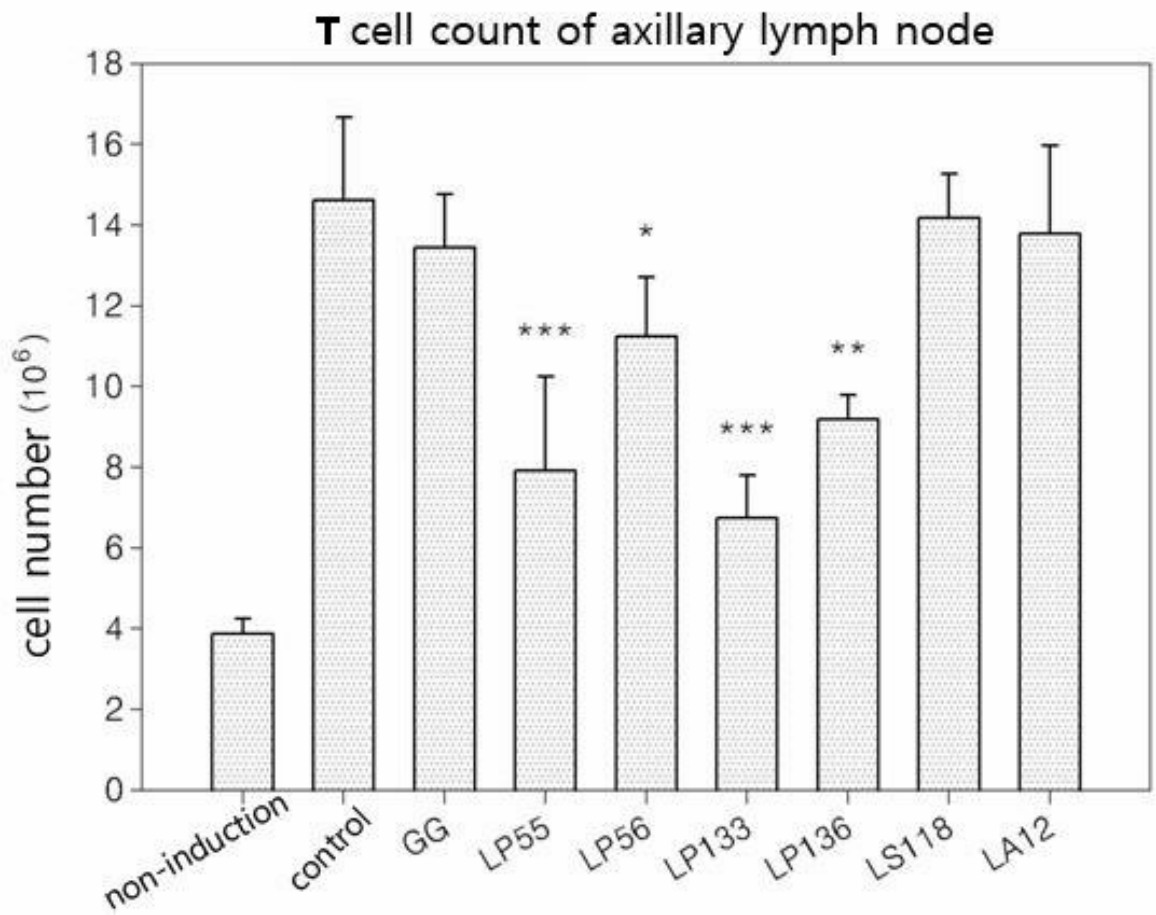

T cell count of axillary lymph node
cell number (10^6)
18
16
14
12
10
8
6
4
2
0
***
*
***
**
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 16b

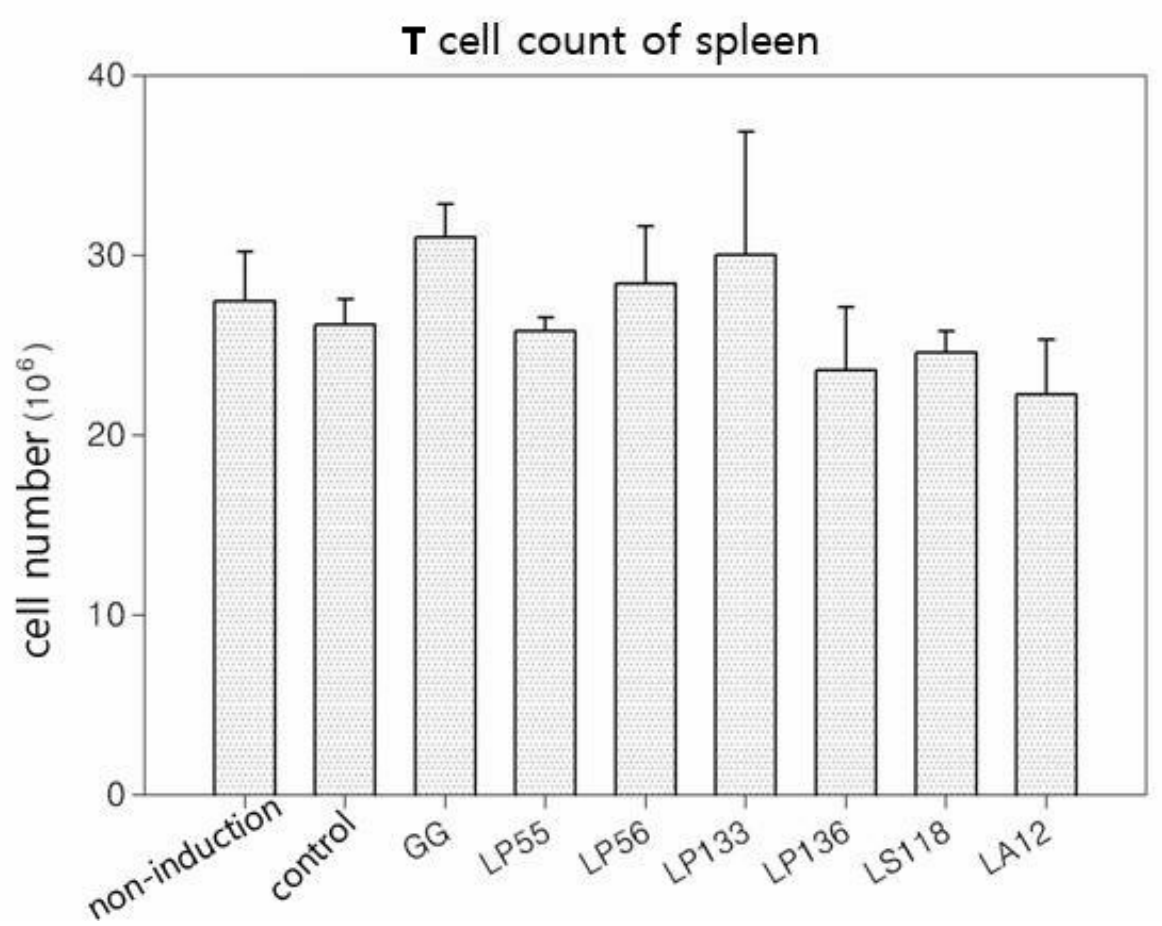

T cell count of spleen
cell number (10^6)
40
30
20
10
0
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 17a

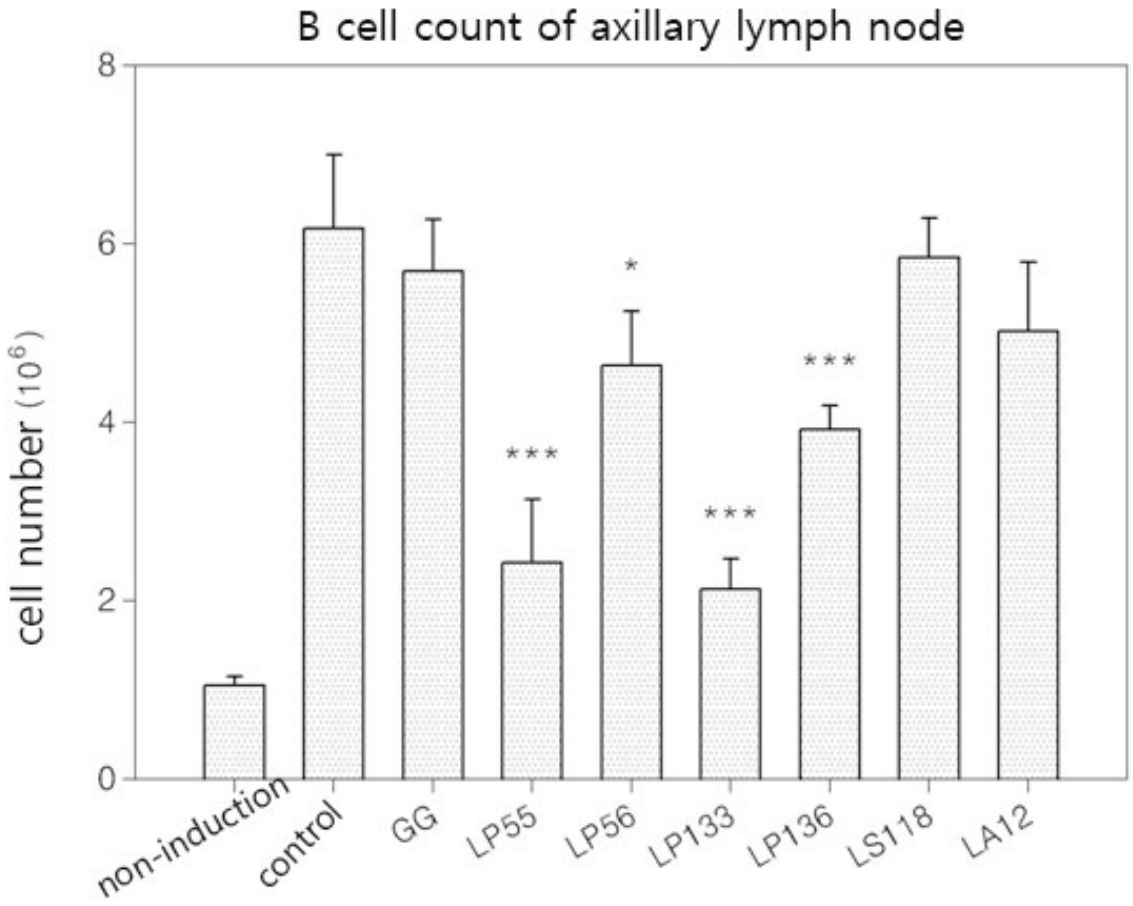

B cell count of axillary lymph node
cell number (10^6)
8
6
4
2
0
*
***
***
***
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 17b

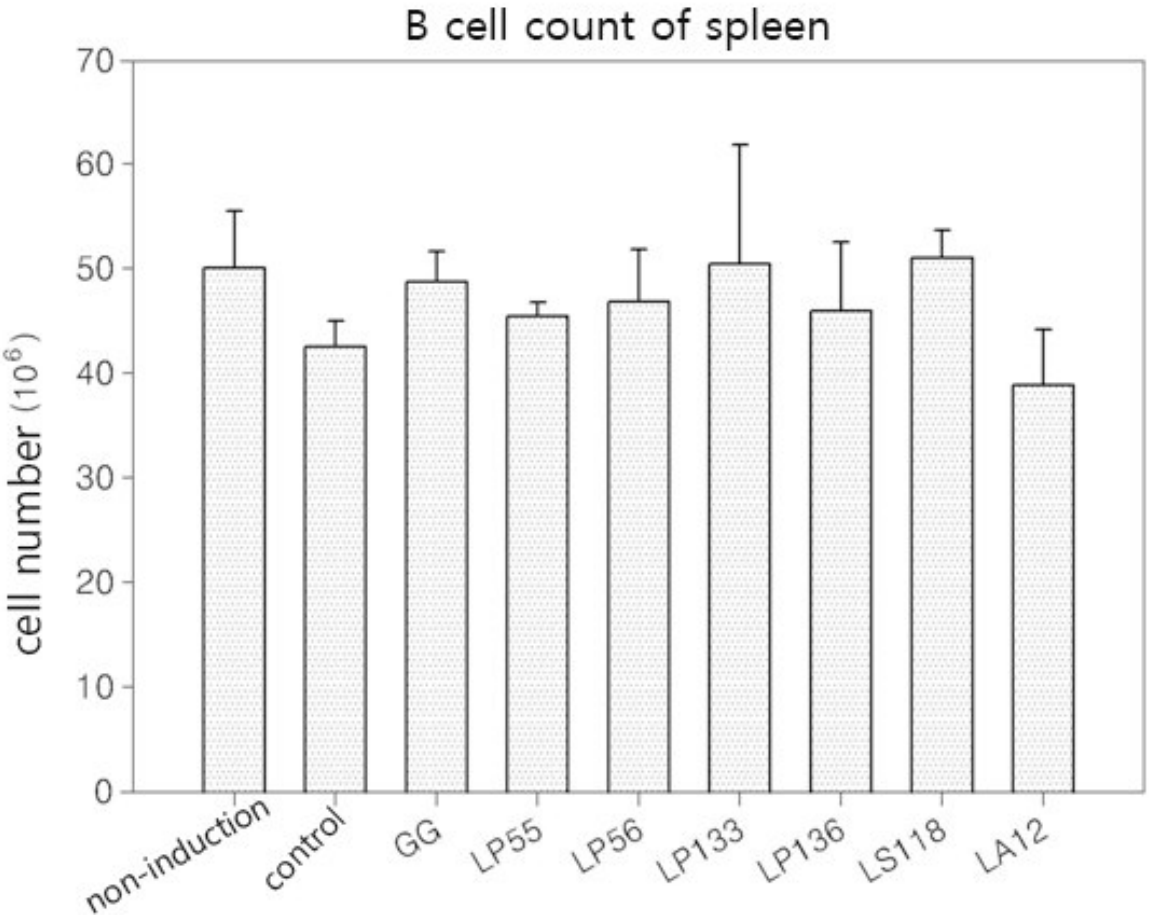

B cell count of spleen
cell number (10^6)
70
60
50
40
30
20
10
0
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 18a

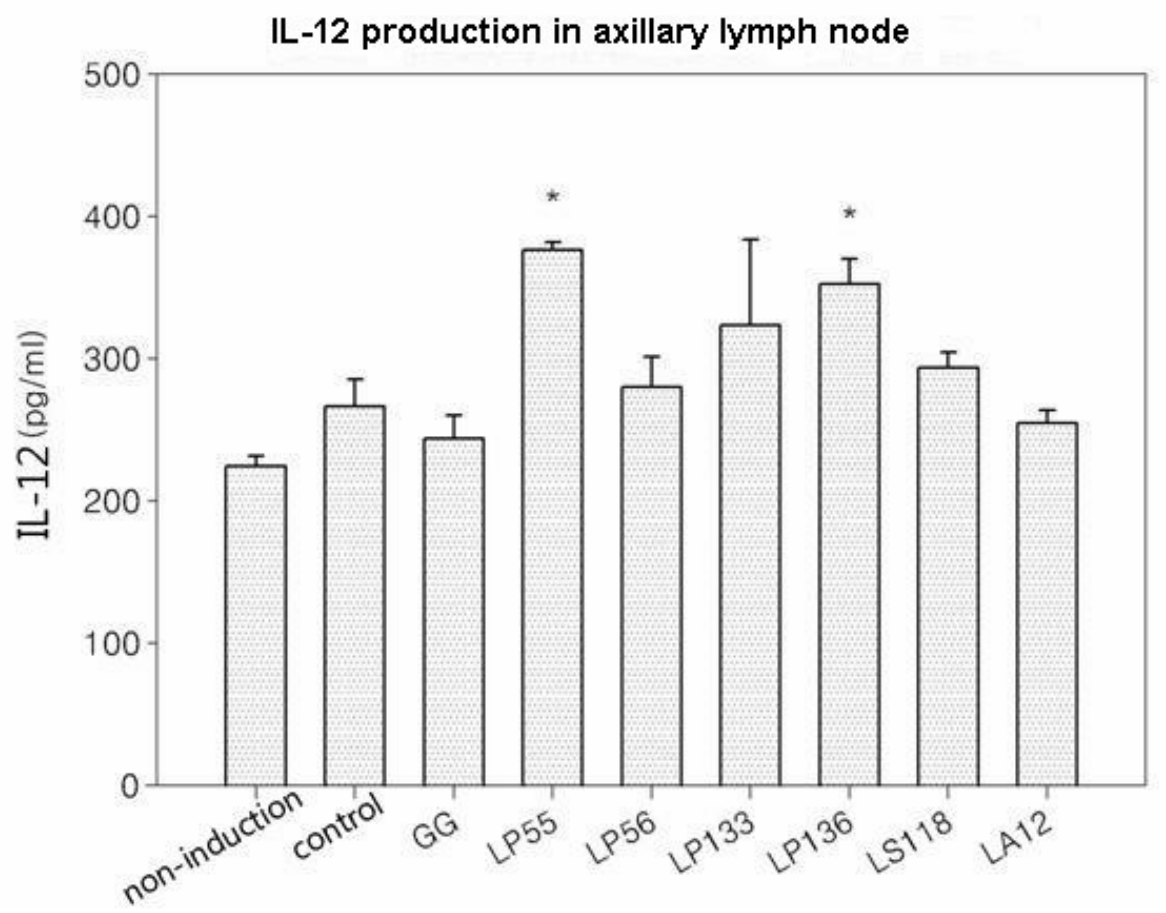

IL-12 production in axillary lymph node
IL-12 (pg/ml)
500
400
300
200
100
0
*
*
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 18b

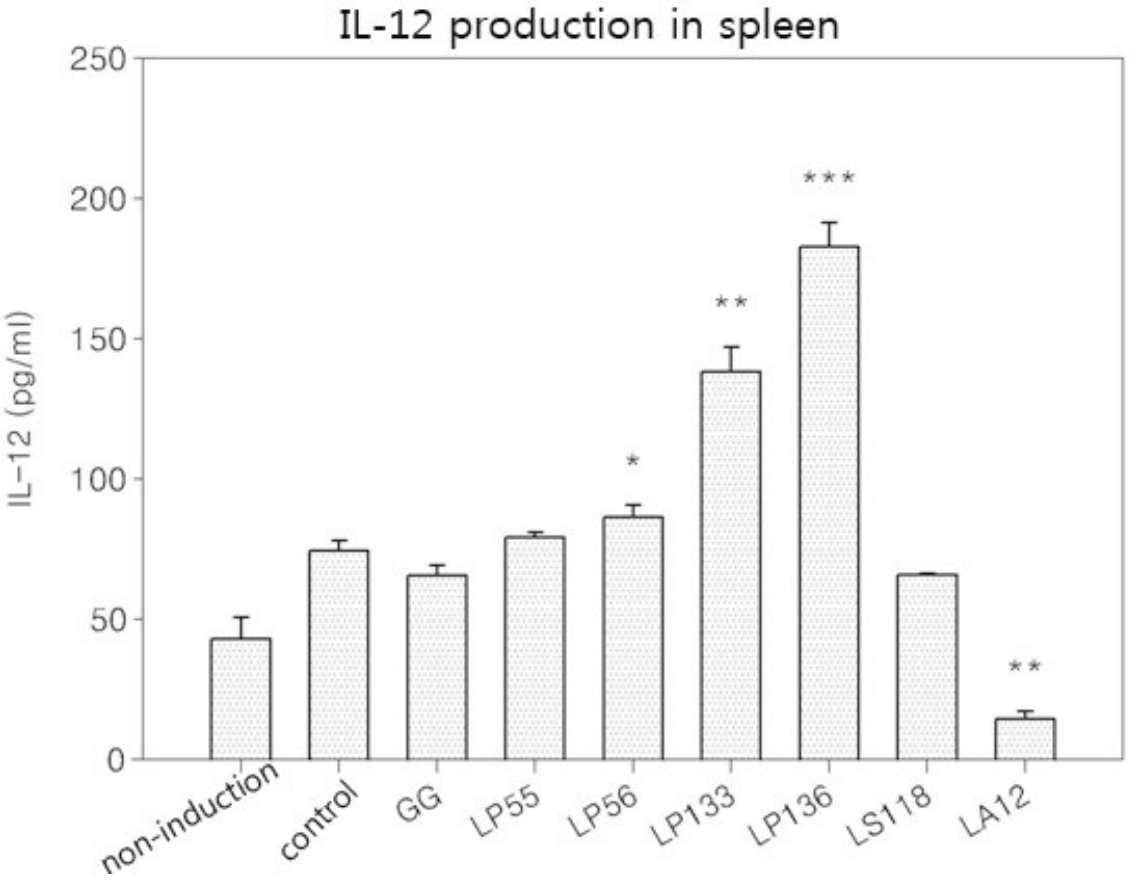

IL-12 production in spleen
IL-12 (pg/ml)
250
200
150
100
50
0
*
**
***
**
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 19a

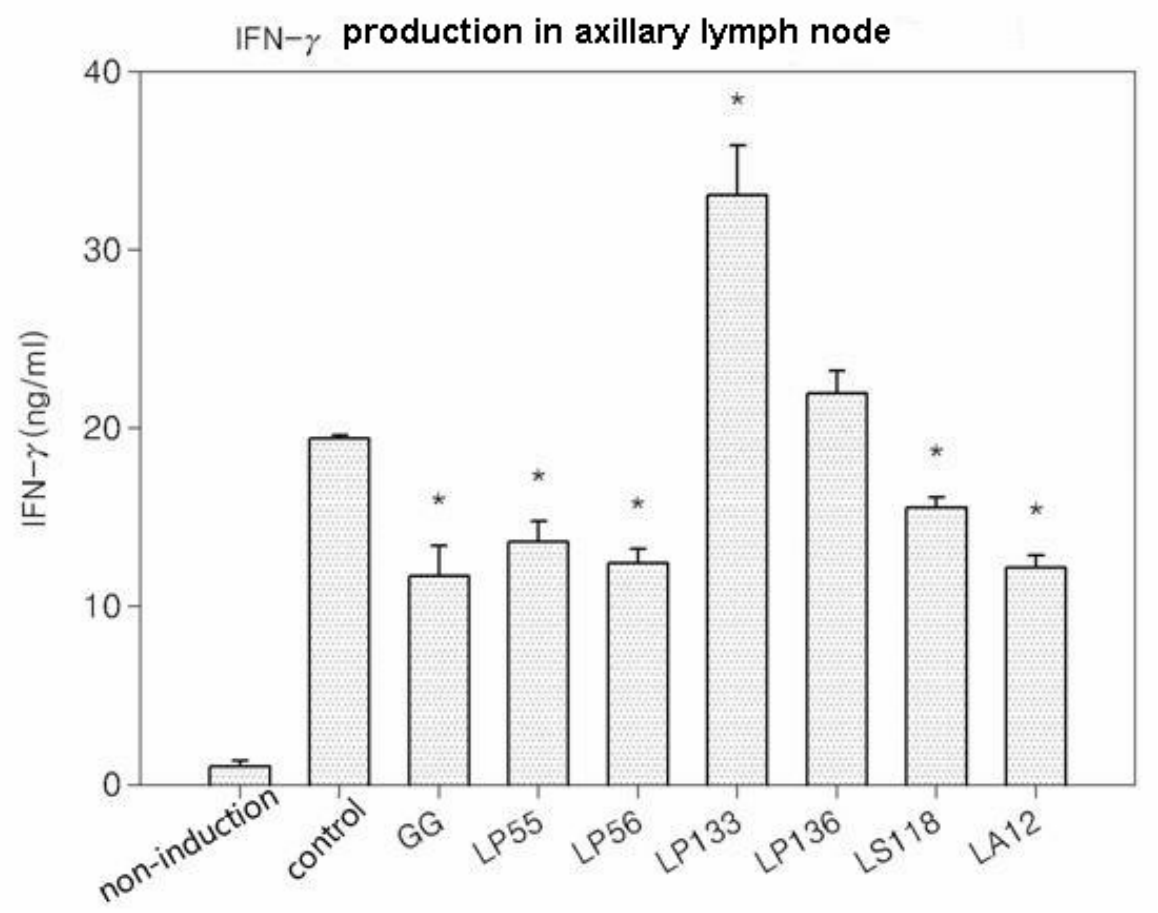
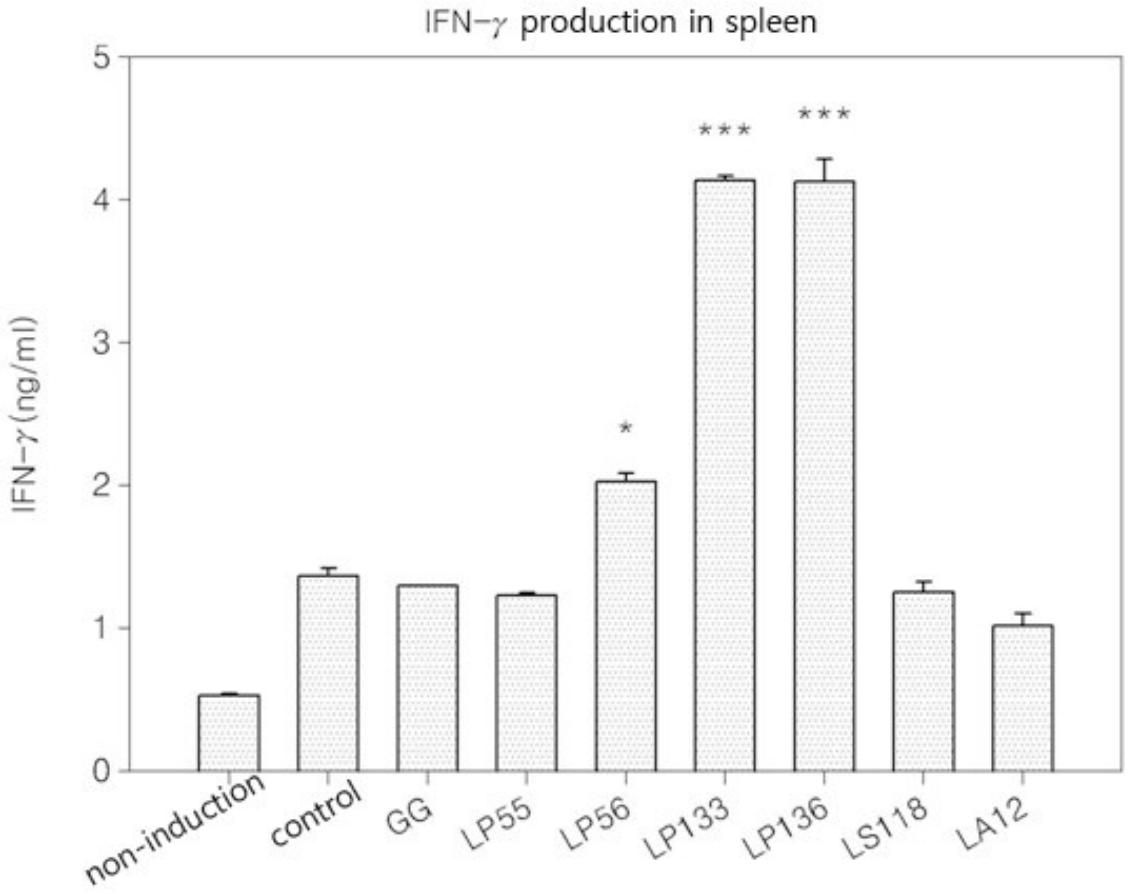

IFN-γ production in axillary lymph node
IFN-γ (ng/ml)
40
30
20
10
0
*
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12

FIG. 19b


IFN-γ production in spleen
IFN-γ (ng/ml)
5
4
3
2
1
0
*
***
***
non-induction
control
GG
LP55
LP56
LP133
LP136
LS118
LA12