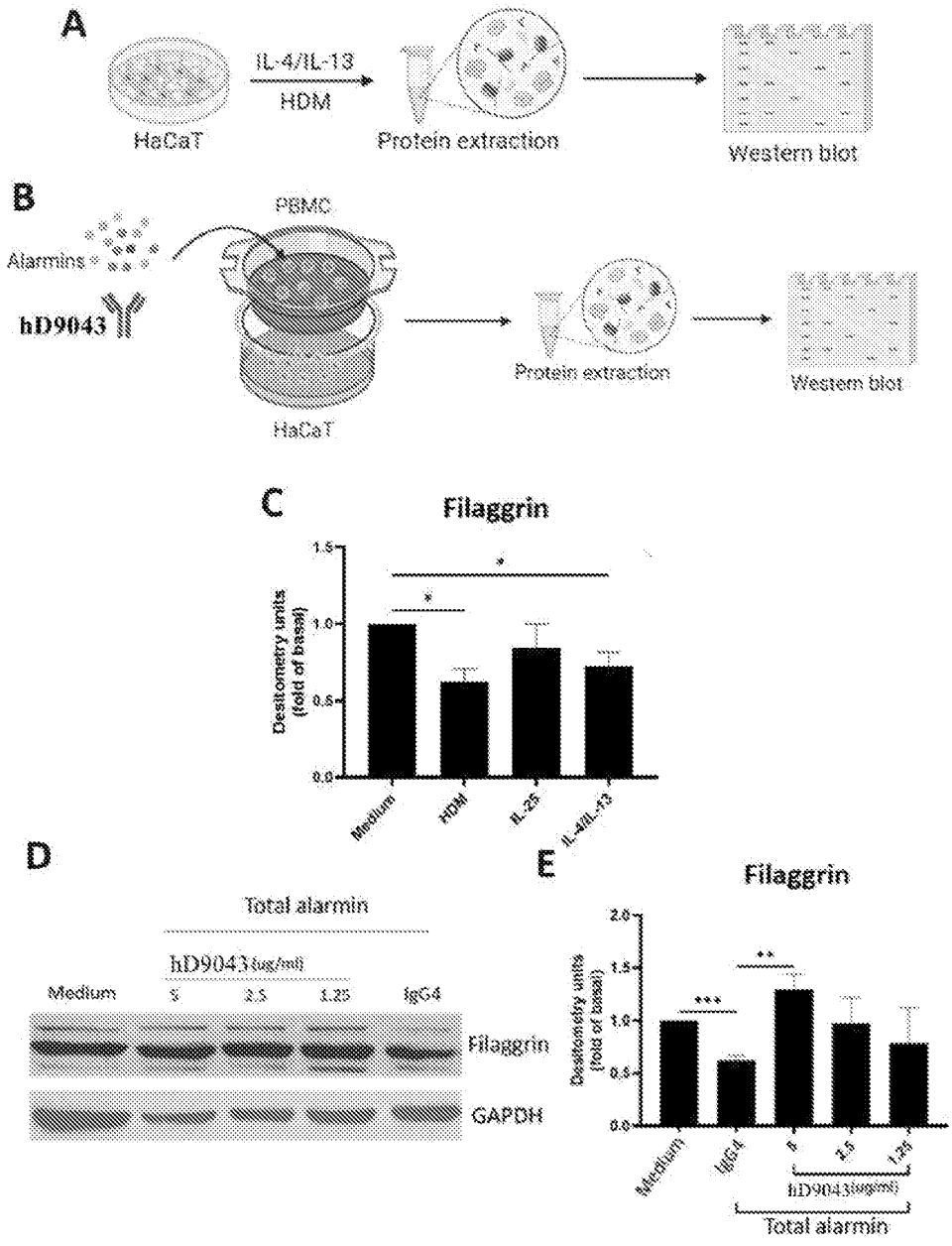
A
IL-4/IL-13
HDM
HaCaT
Protein extraction
Western blot
B
PBMC
Alarmins
hD9043
HaCaT
Protein extraction
Western blot
C
Filaggrin
Desitometry units (fold of basal)
Medium
HDM
IL-25
IL-4/IL-13
D
Total alarmin
hD9043(ug/ml)
Medium
5
2.5
1.25
IgG4
Filaggrin
GAPDH
E
Filaggrin
Desitometry units (fold of basal)
Medium
IgG4
5
2.5
1.25
hD9043(ug/ml)
Total alarmin

图 1

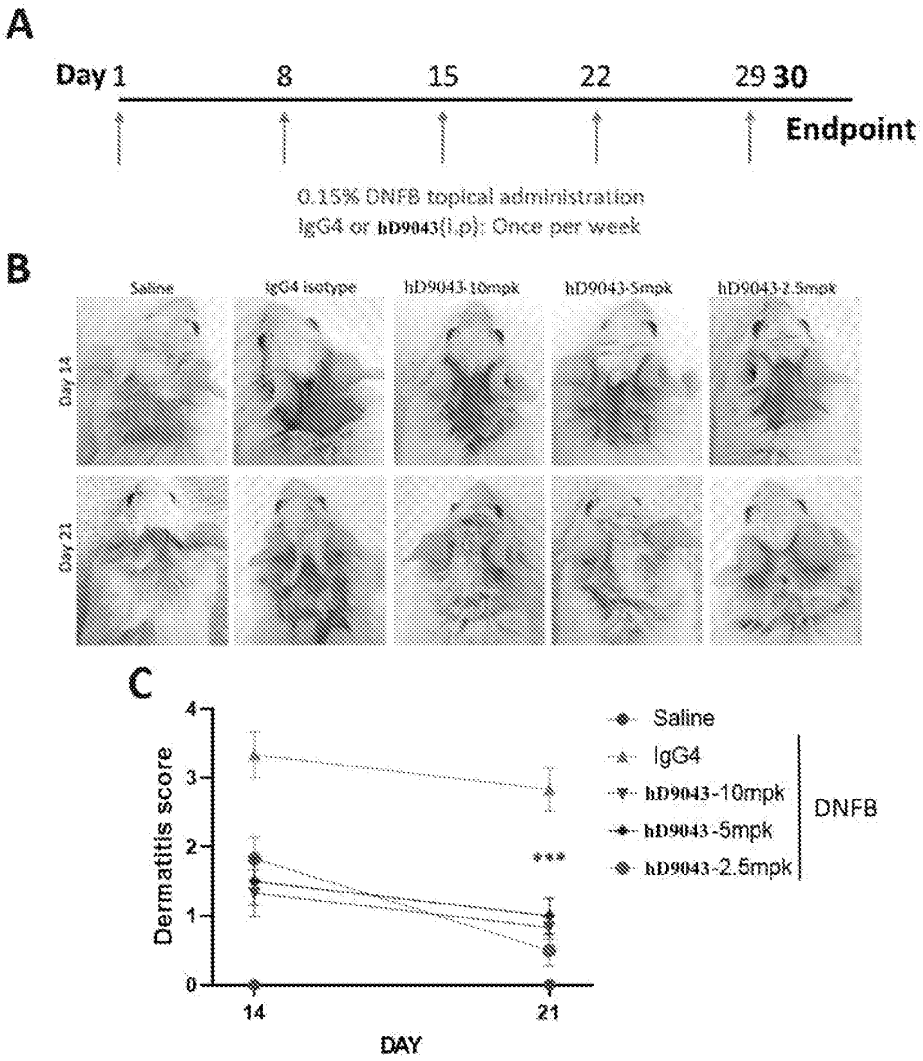
A
Day 1
8
15
22
29 30
Endpoint
0.15% DNFB topical administration
IgG4 or hD9043(i.p): Once per week
B
Saline
IgG4 isotype
hD9043-10mpk
hD9043-5mpk
hD9043-2.5mpk
Day 14
Day 21
C
Dermatitis score
DAY
14
21
***
Saline
IgG4
hD9043-10mpk
hD9043-5mpk
hD9043-2.5mpk
DNFB

图 2

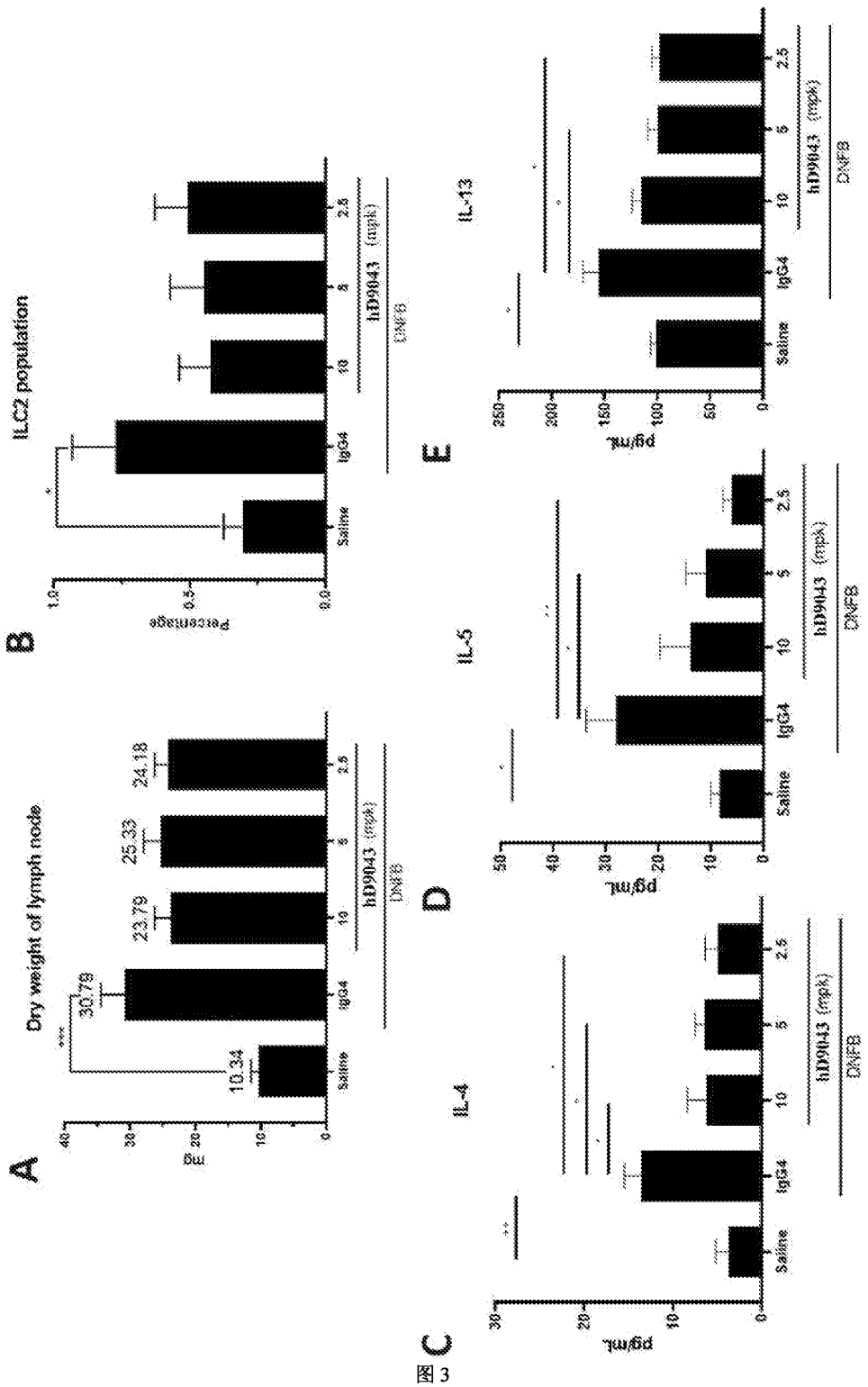
A
Dry weight of lymph node
mg
40
30
20
10
0
10.34
30.79
23.79
25.33
24.18
***
Saline
IgG4
hD9043 (mpk)
DNFB
B
ILC2 population
Percentage
1.0
0.5
0.0
C
IL-4
pg/mL
30
20
10
0
D
IL-5
pg/mL
50
40
30
20
10
0
E
IL-13
pg/mL
250
200
150
100
50
0
2.5
5
10
8
2.5

图 3

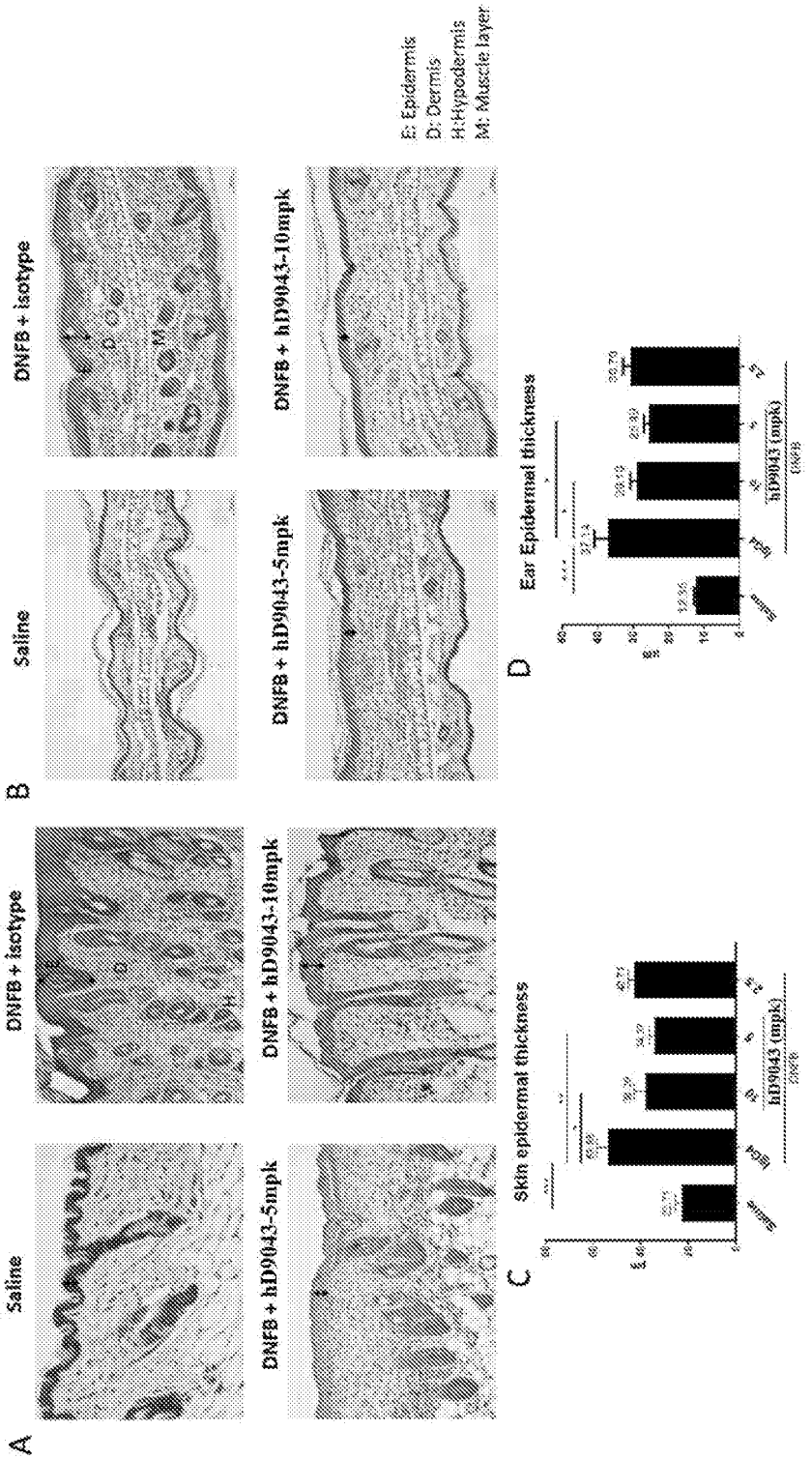
A
Saline
DNFB + isotype
DNFB + hD9043-5mpk
DNFB + hD9043-10mpk
B
Saline
DNFB + isotype
DNFB + hD9043-5mpk
DNFB + hD9043-10mpk
E: Epidermis
D: Dermis
H:Hypodermis
M: Muscle layer
C
Skin epidermal thickness
hD9043 (mpk)
D
Ear Epidermal thickness
hD9043 (mpk)

图 4

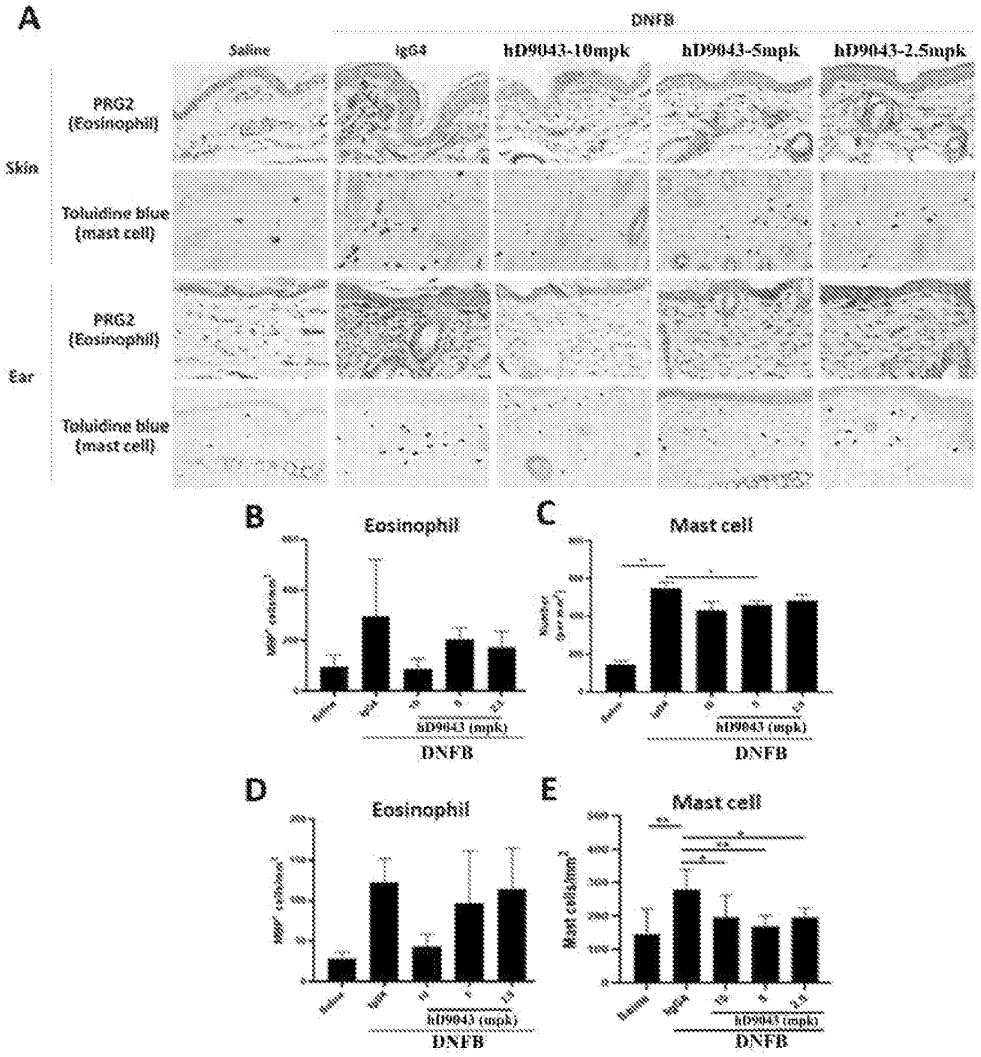
A
DNFB
Saline
IgG4
hD9043-10mpk
hD9043-5mpk
hD9043-2.5mpk
Skin
PRG2 (Eosinophil)
Toluidine blue (mast cell)
Ear
PRG2 (Eosinophil)
Toluidine blue (mast cell)
B
Eosinophil
C
Mast cell
hD9043 (mpk)
DNFB
D
Eosinophil
E
Mast cell
hD9043 (mpk)
DNFB

图 5

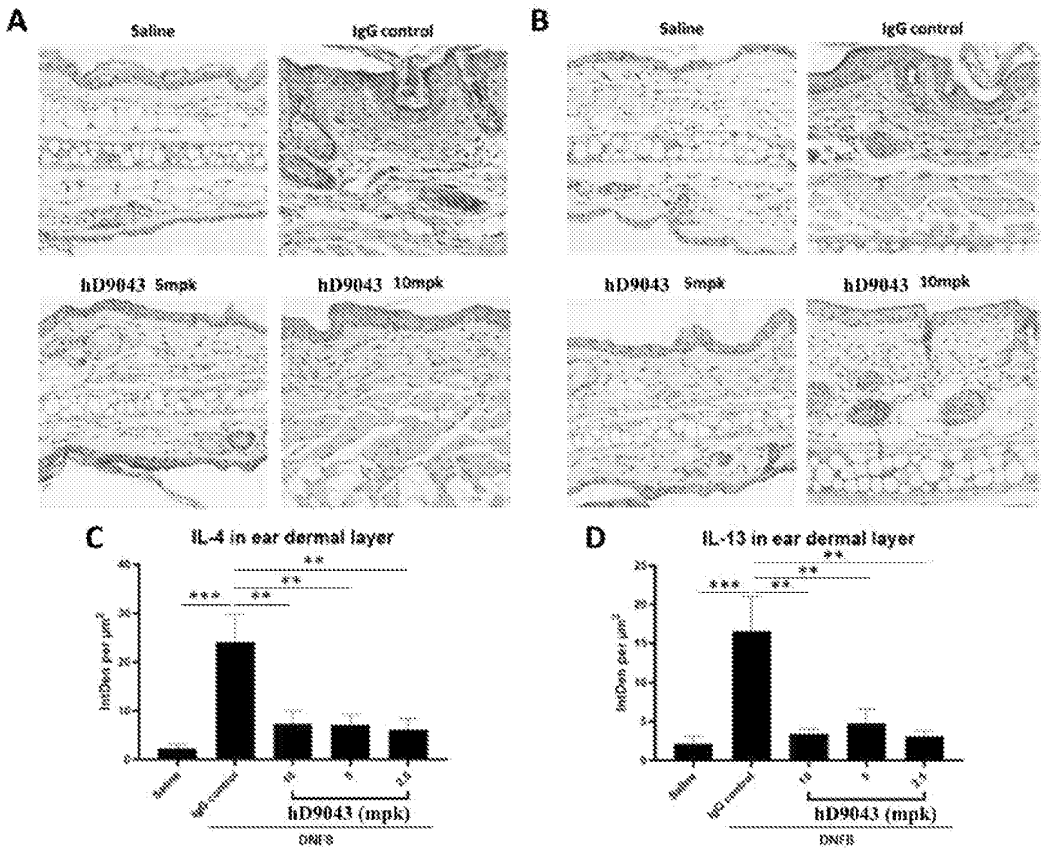
A
Saline
IgG control
hD9043 5mpk
hD9043 10mpk
B
Saline
IgG control
hD9043 5mpk
hD9043 10mpk
C
IL-4 in ear dermal layer
hD9043 (mpk)
DNFB
D
IL-13 in ear dermal layer
hD9043 (mpk)
DNFB

图 6

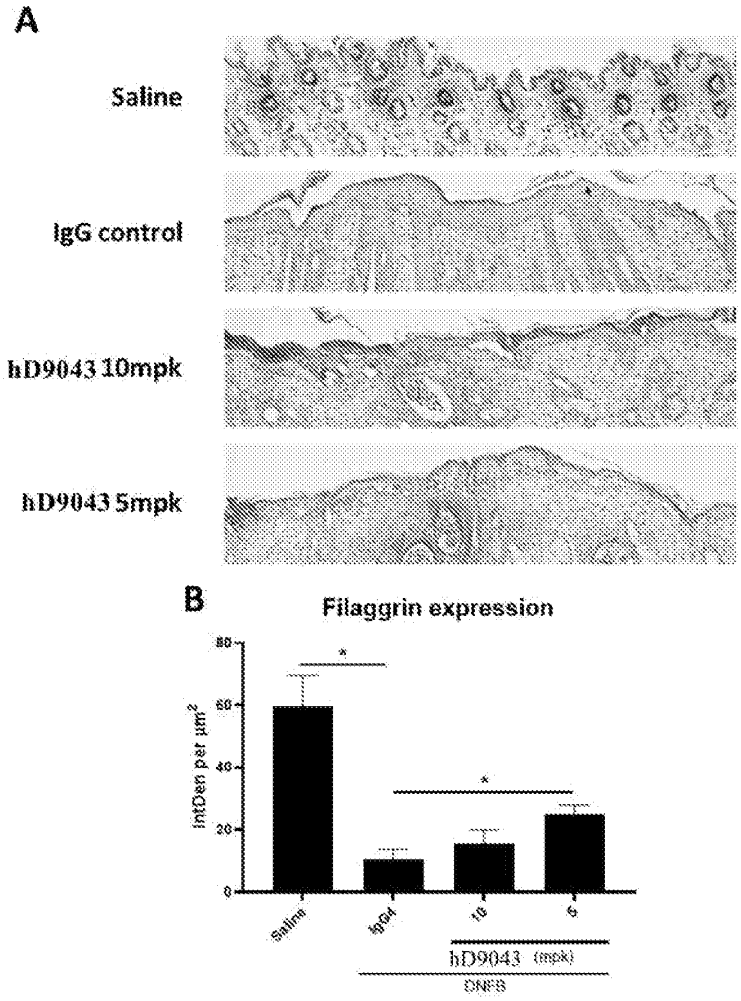
A
Saline
IgG control
hD9043 10mpk
hD9043 5mpk
B
Filaggrin expression
IntDen per μm²
80
60
40
20
0
*
*
Saline
IgG4
10
5
hD9043 (mpk)
DNFB

图 7

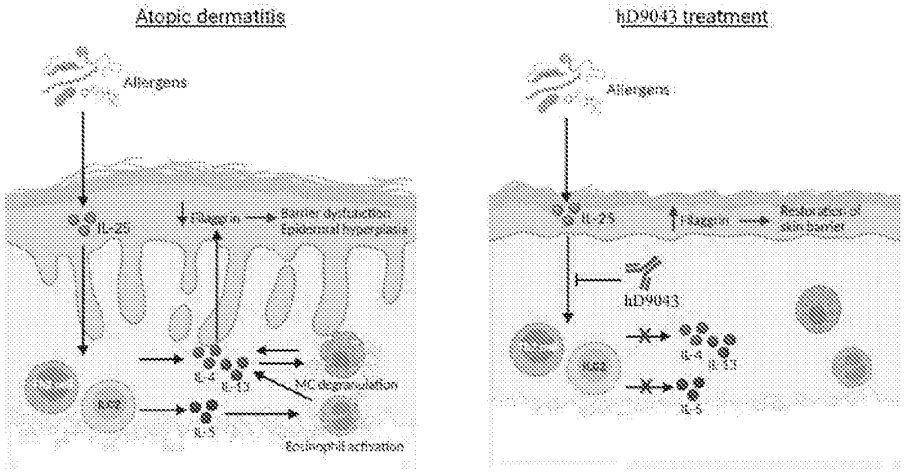
Atopic dermatitis
hD9043 treatment
Allergens
IL-25
Filaggrin
Barrier dysfunction
Epidermal hyperplasia
IL-4
IL-13
MC degranulation
ILC2
IL-5
Eosinophil activation
Allergens
IL-25
Filaggrin
Restoration of skin barrier
hD9043
ILC2
IL-4
IL-13
IL-5

图 8