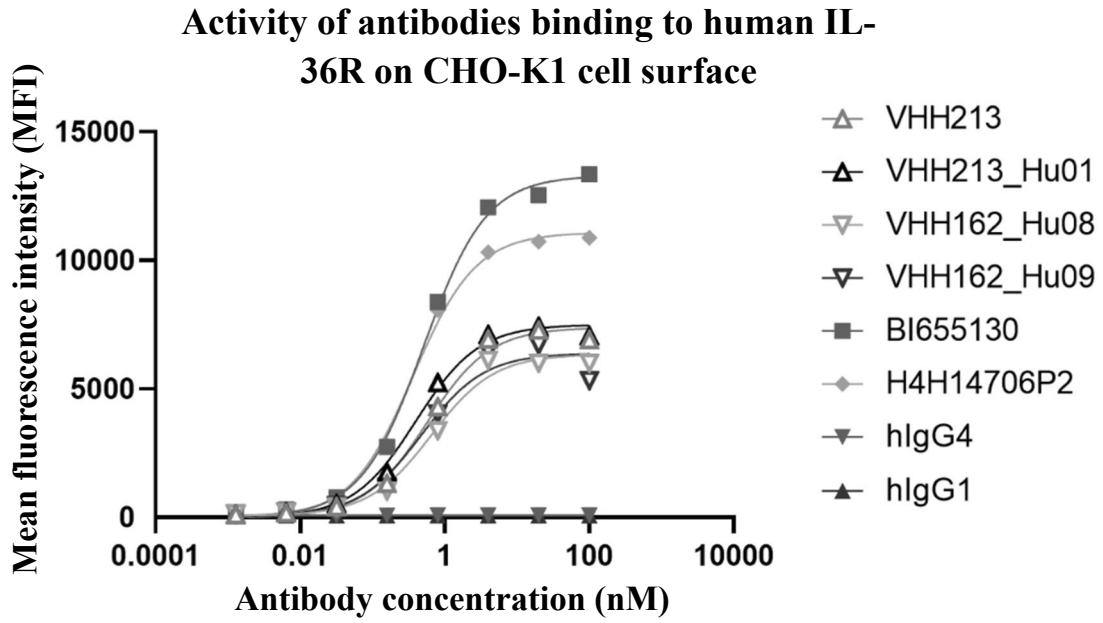

Activity of antibodies binding to human IL-36R on CHO-K1 cell surface
Mean fluorescence intensity (MFI)
15000
10000
5000
0
0.0001
0.01
1
100
10000
Antibody concentration (nM)
VHH213
VHH213_Hu01
VHH162_Hu08
VHH162_Hu09
BI655130
H4H14706P2
hIgG4
hIgG1

FIG. 1A

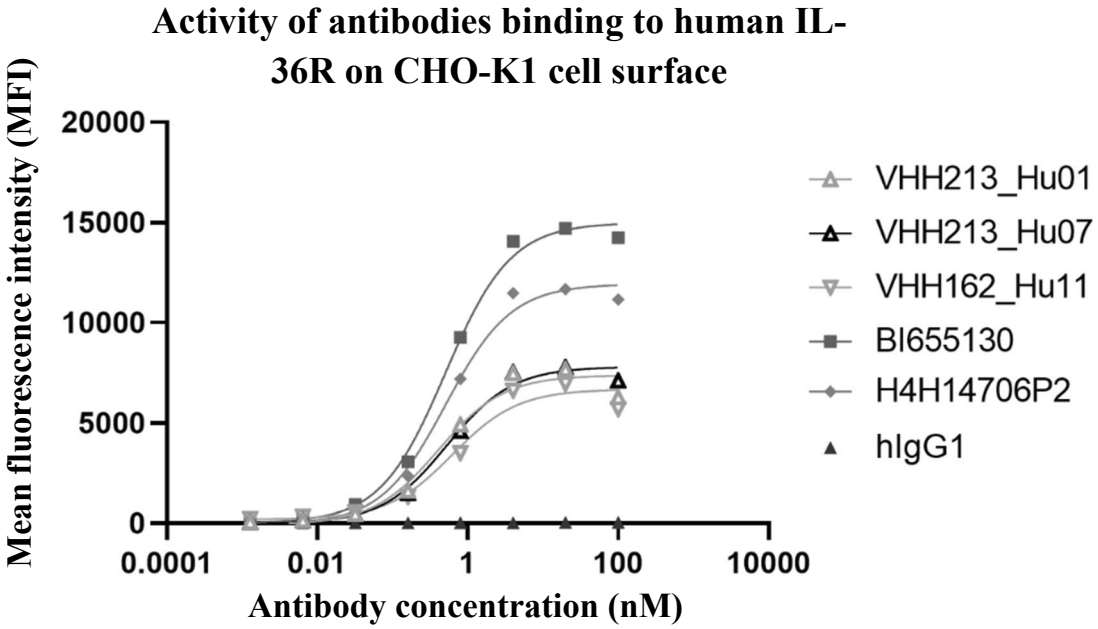

Activity of antibodies binding to human IL-36R on CHO-K1 cell surface
Mean fluorescence intensity (MFI)
20000
15000
10000
5000
0
0.0001
0.01
1
100
10000
Antibody concentration (nM)
VHH213_Hu01
VHH213_Hu07
VHH162_Hu11
BI655130
H4H14706P2
hIgG1

FIG. 1B

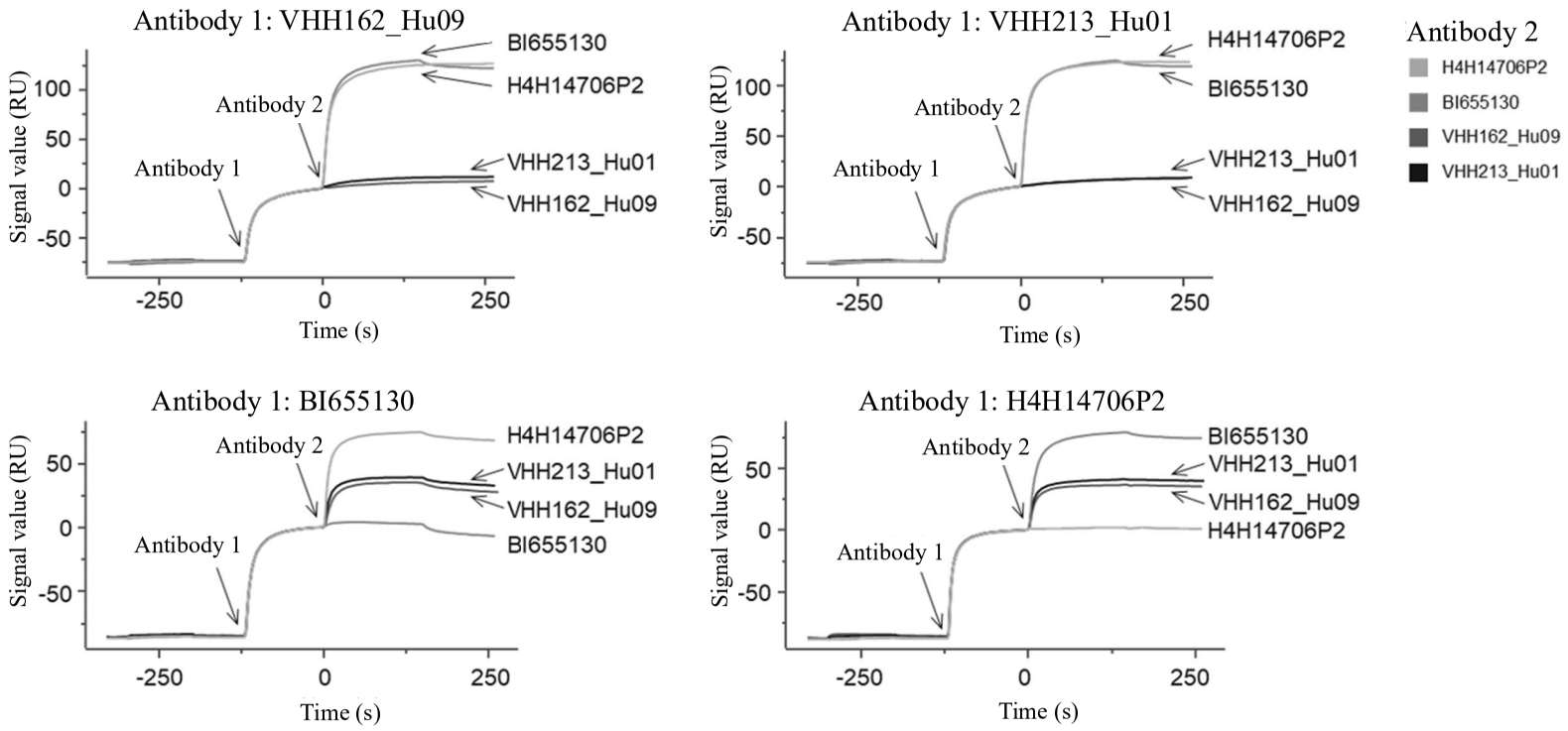

Antibody 1: VHH162_Hu09
Antibody 1: VHH213_Hu01
Antibody 1: BI655130
Antibody 1: H4H14706P2
Signal value (RU)
Time (s)
Antibody 1
Antibody 2
BI655130
H4H14706P2
VHH213_Hu01
VHH162_Hu09
Antibody 2
H4H14706P2
BI655130
VHH162_Hu09
VHH213_Hu01

FIG. 2

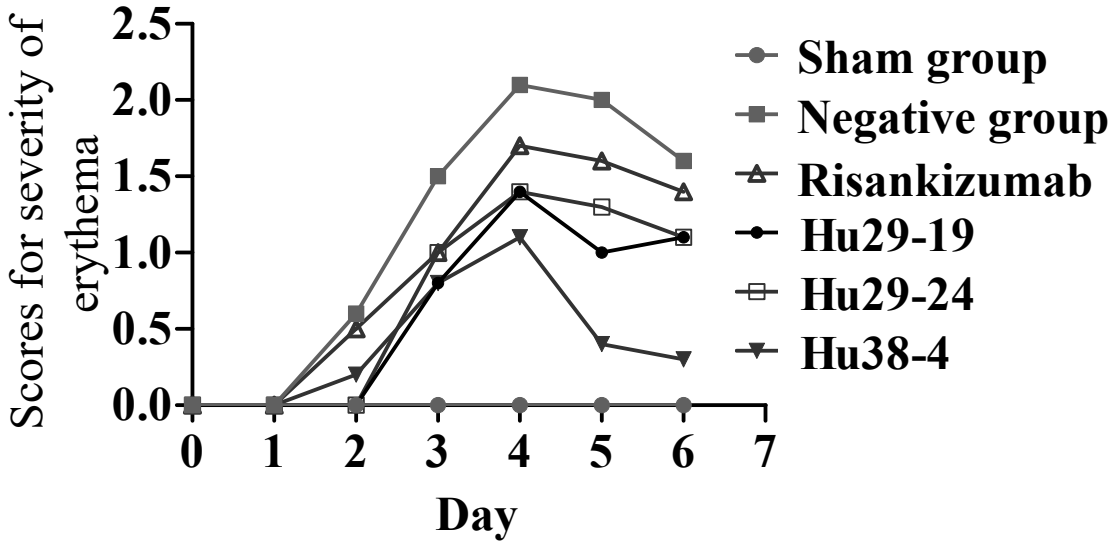

Scores for severity of erythema
2.5
2.0
1.5
1.0
0.5
0.0
0
1
2
3
4
5
6
7
Day
Sham group
Negative group
Risankizumab
Hu29-19
Hu29-24
Hu38-4

FIG. 3A

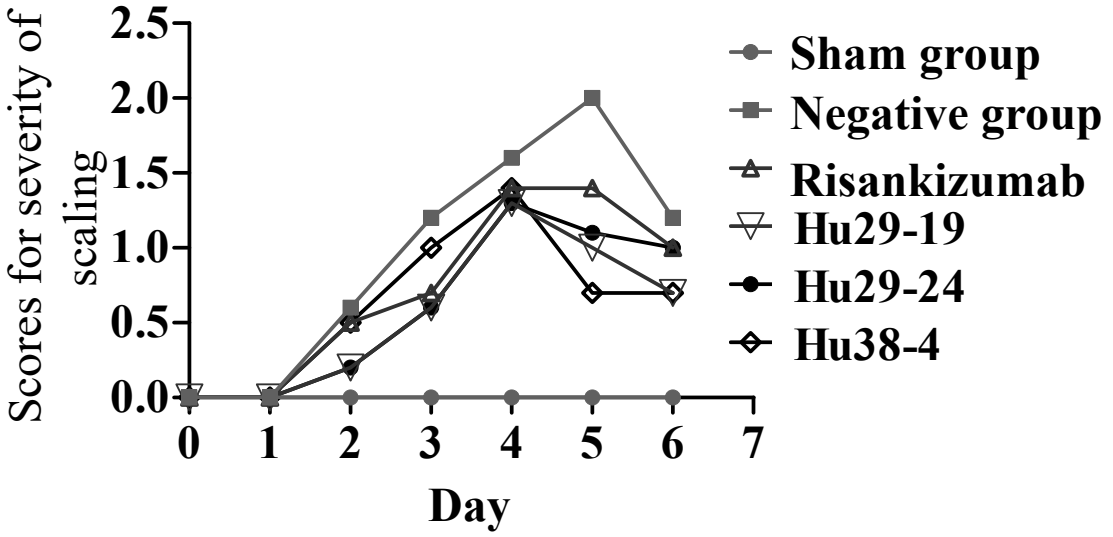

Scores for severity of scaling
2.5
2.0
1.5
1.0
0.5
0.0
0
1
2
3
4
5
6
7
Day
Sham group
Negative group
Risankizumab
Hu29-19
Hu29-24
Hu38-4

FIG. 3B

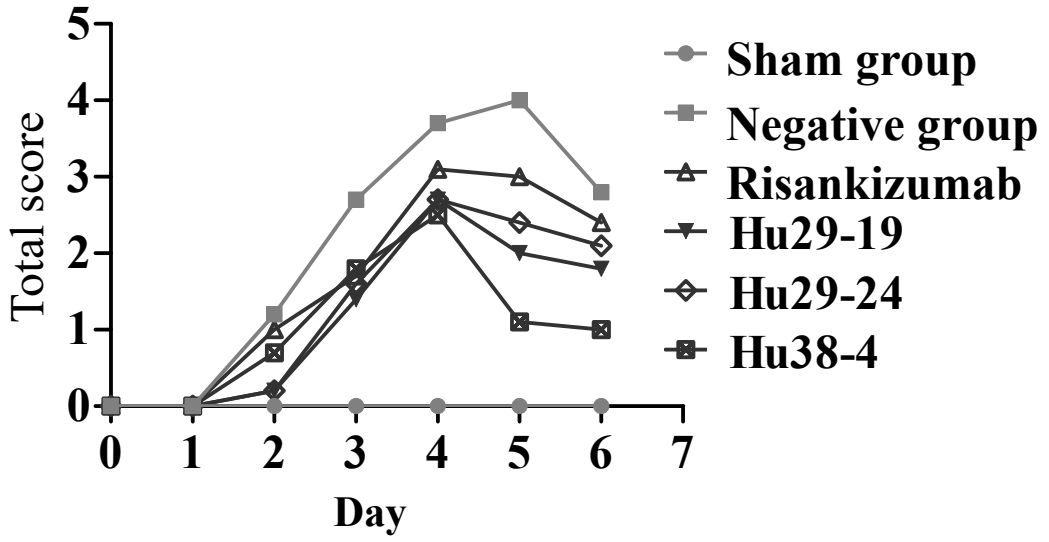

Total score
5
4
3
2
1
0
0
1
2
3
4
5
6
7
Day
Sham group
Negative group
Risankizumab
Hu29-19
Hu29-24
Hu38-4

FIG. 3C

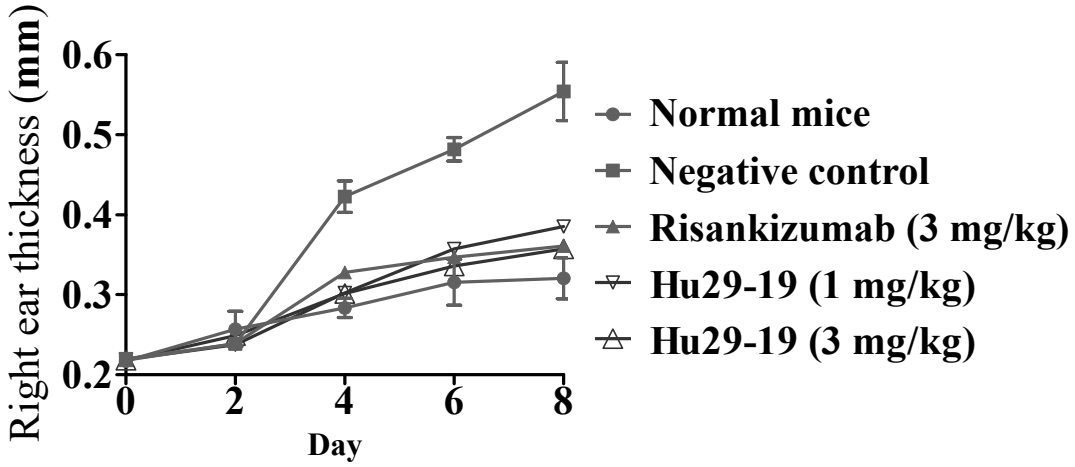

Right ear thickness (mm)
0.6
0.5
0.4
0.3
0.2
0
2
4
6
8
Day
Normal mice
Negative control
Risankizumab (3 mg/kg)
Hu29-19 (1 mg/kg)
Hu29-19 (3 mg/kg)

FIG. 4A

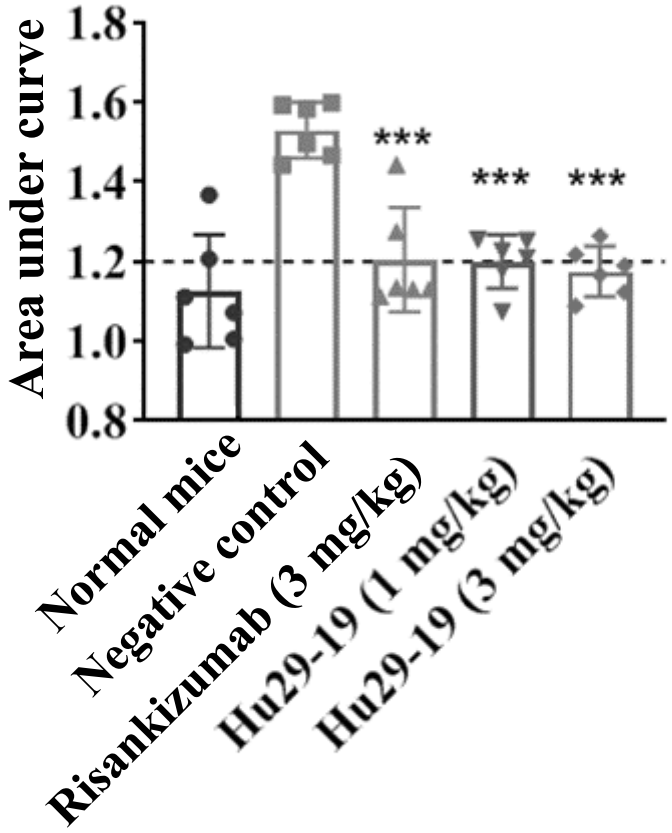

Area under curve
1.8
1.6
1.4
1.2
1.0
0.8
***
***
***
Normal mice
Negative control
Risankizumab (3 mg/kg)
Hu29-19 (1 mg/kg)
Hu29-19 (3 mg/kg)

FIG. 4B

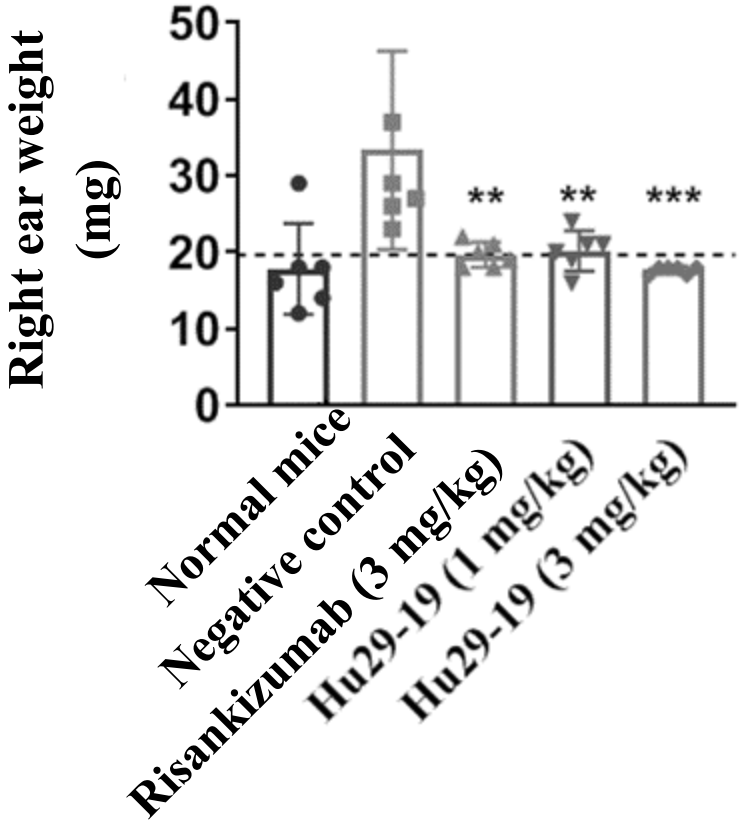

Right ear weight (mg)
50
40
30
20
10
0
**
**
***
Normal mice
Negative control
Risankizumab (3 mg/kg)
Hu29-19 (1 mg/kg)
Hu29-19 (3 mg/kg)

FIG. 4C

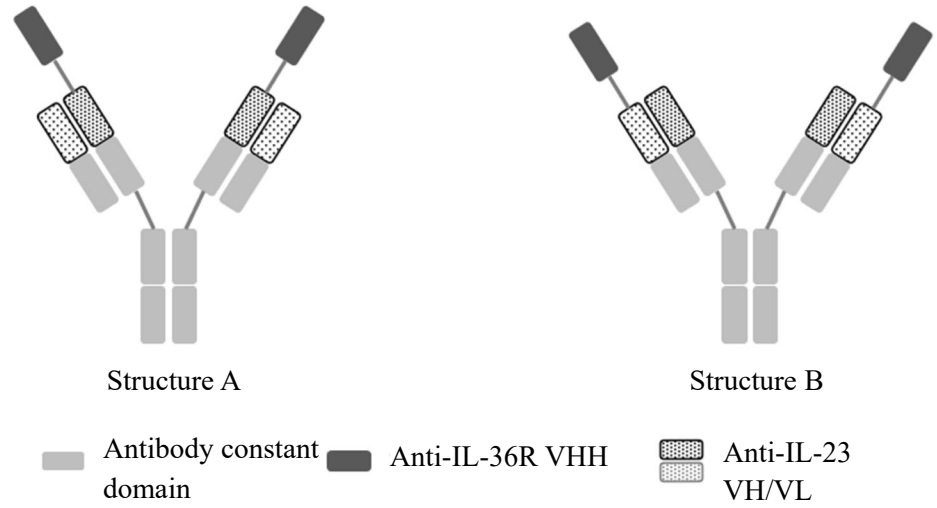


FIG. 5

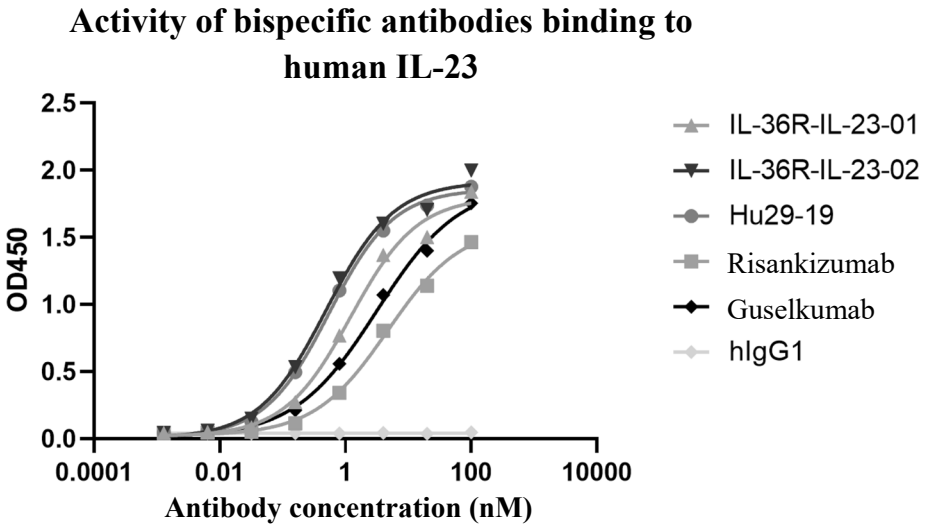


FIG. 6A

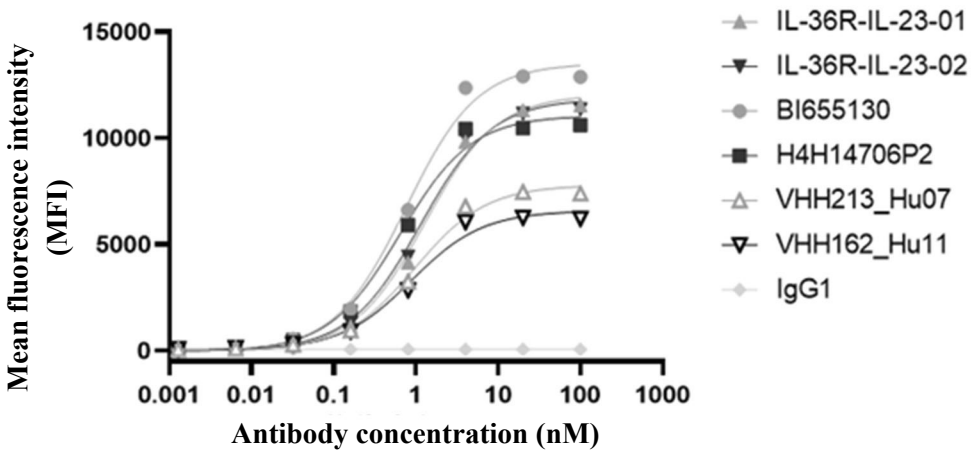


FIG. 6B

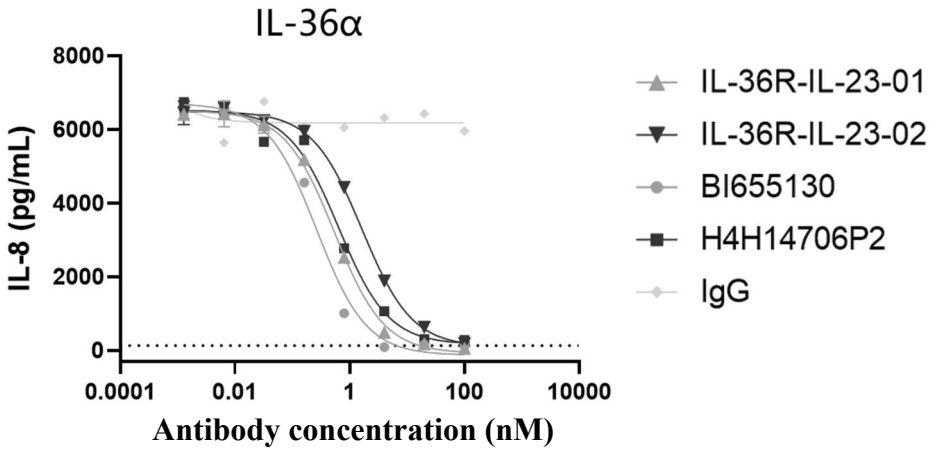


FIG. 7A

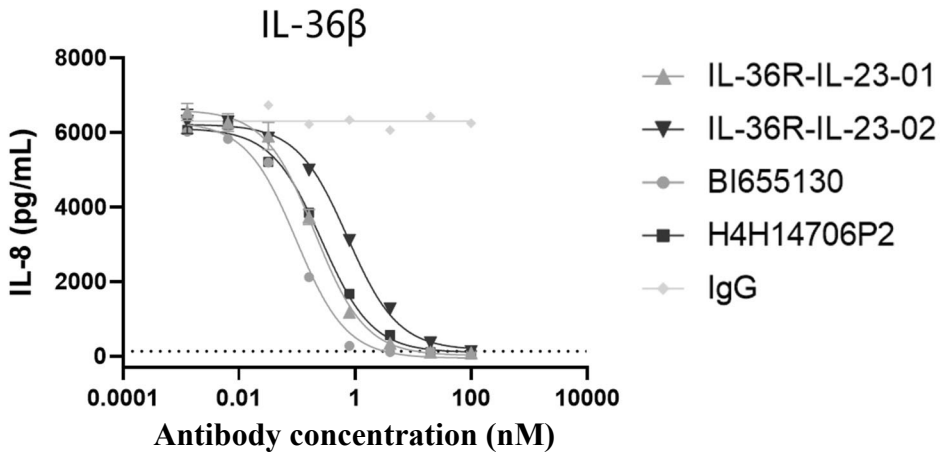


FIG. 7B

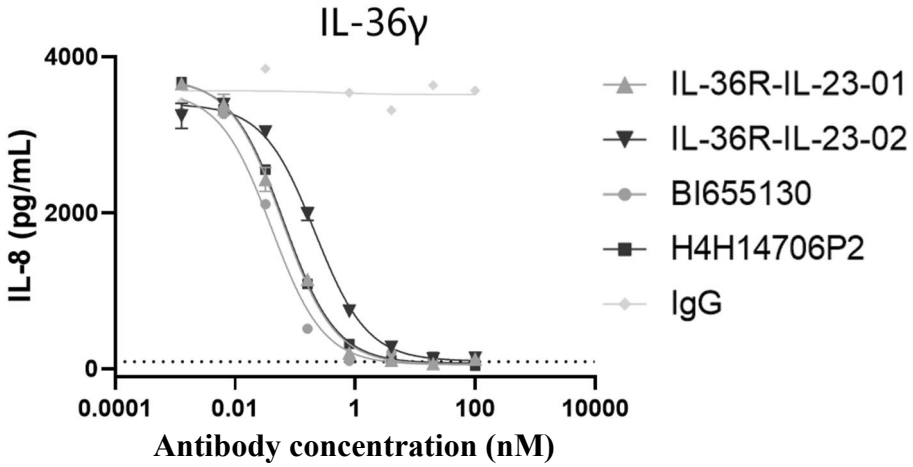


FIG. 7C

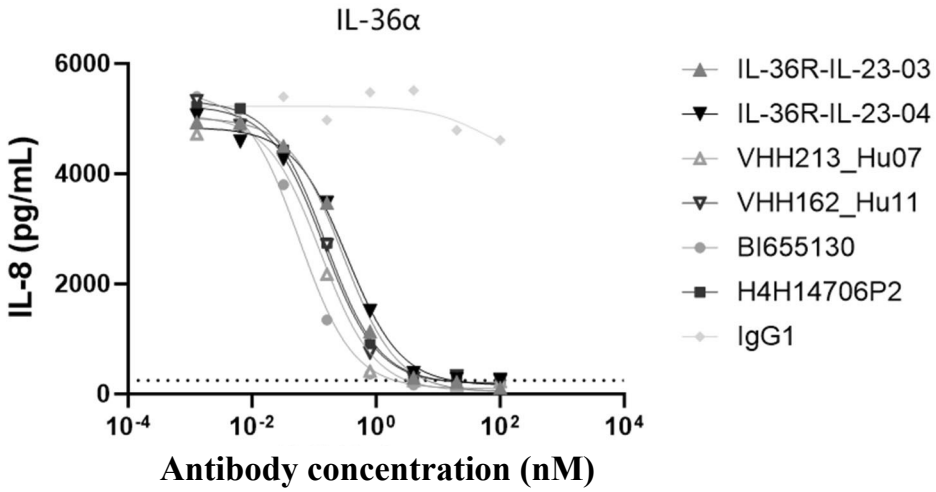


FIG. 7D

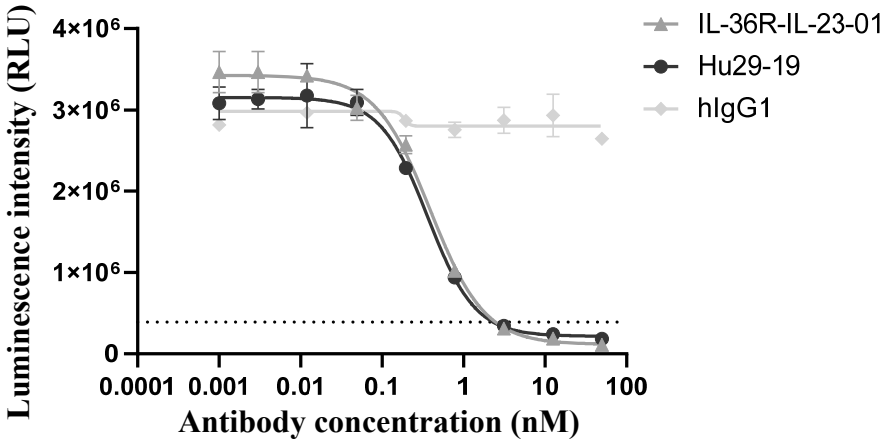


FIG. 8A

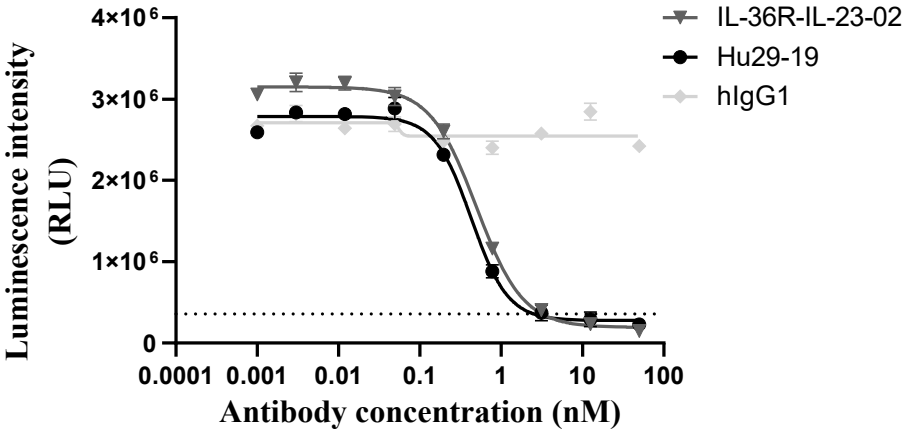


FIG. 8B

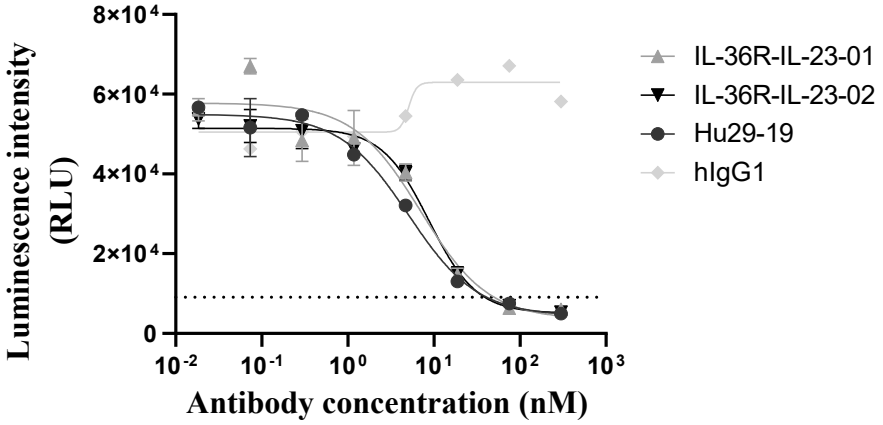


FIG. 9

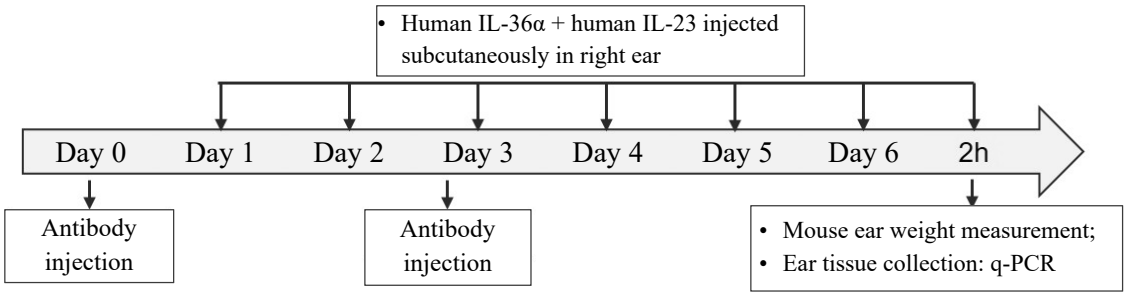


FIG. 10A

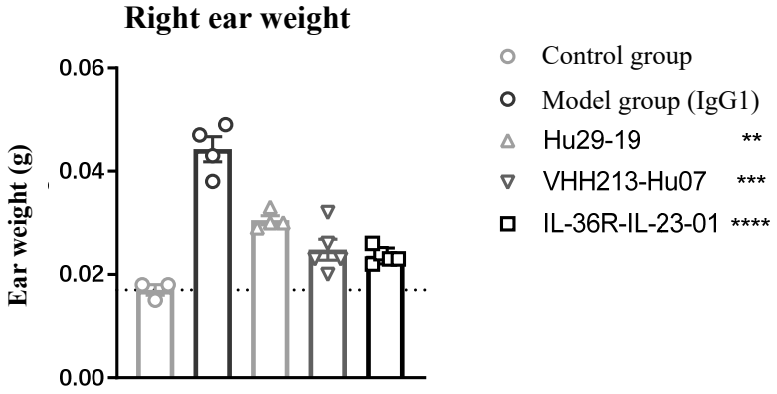


FIG. 10B

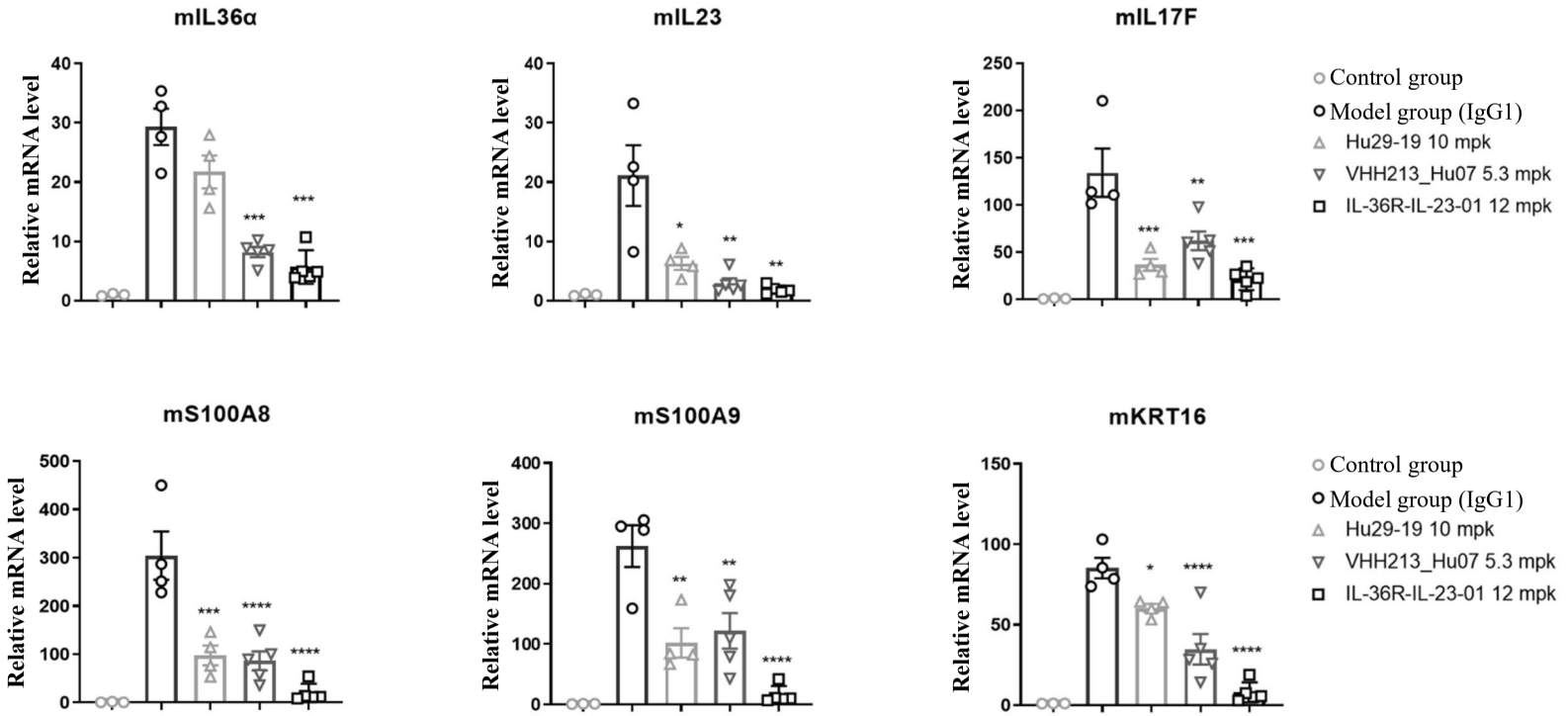

mIL36α
mIL23
mIL17F
mS100A8
mS100A9
mKRT16
Relative mRNA level
Control group
Model group (IgG1)
Hu29-19 10 mpk
VHH213_Hu07 5.3 mpk
IL-36R-IL-23-01 12 mpk

FIG. 10C

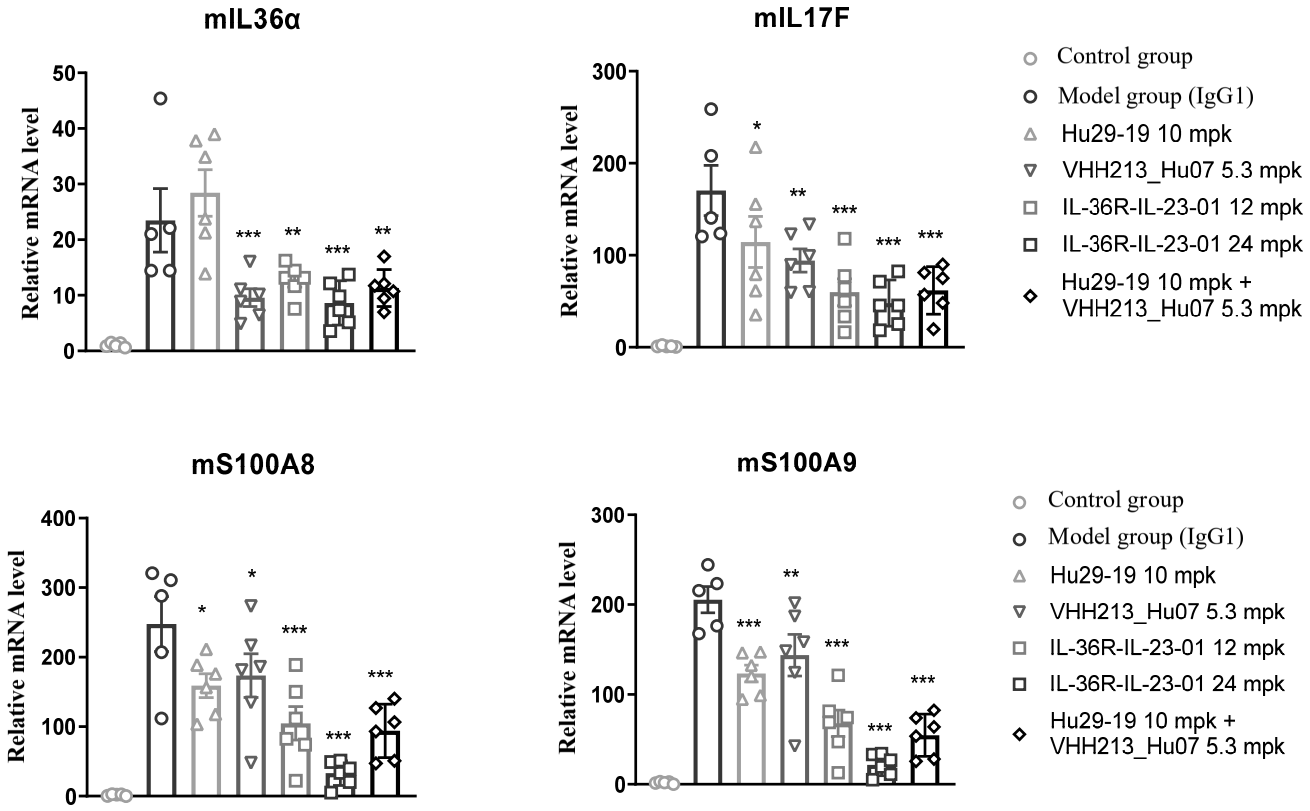

mIL36α
Relative mRNA level
50
40
30
20
10
0
***
**
***
**
mIL17F
Relative mRNA level
300
200
100
0
*
**
***
***
***
Control group
Model group (IgG1)
Hu29-19 10 mpk
VHH213_Hu07 5.3 mpk
IL-36R-IL-23-01 12 mpk
IL-36R-IL-23-01 24 mpk
Hu29-19 10 mpk + VHH213_Hu07 5.3 mpk
mS100A8
Relative mRNA level
400
300
200
100
0
*
*
***
***
***
mS100A9
Relative mRNA level
300
200
100
0
***
**
***
***
***
Control group
Model group (IgG1)
Hu29-19 10 mpk
VHH213_Hu07 5.3 mpk
IL-36R-IL-23-01 12 mpk
IL-36R-IL-23-01 24 mpk
Hu29-19 10 mpk + VHH213_Hu07 5.3 mpk

FIG. 11