Fig. 1

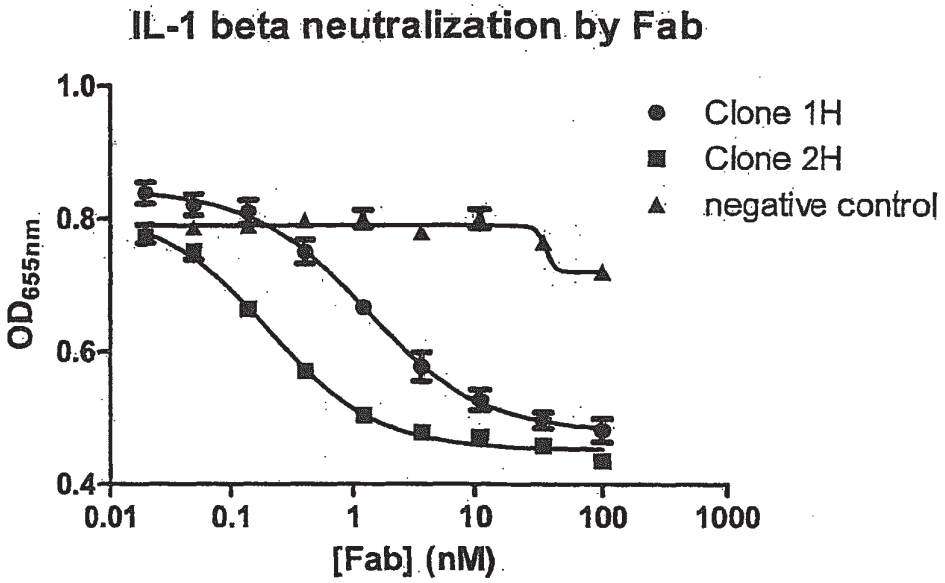

IL-1 beta neutralization by Fab
1.0
0.8
0.6
0.4
OD655nm
0.01
0.1
1
10
100
1000
[Fab] (nM)
Clone 1H
Clone 2H
negative control

Fig. 2

1H_light chain

AATTTTATGCTGACTCAGCCCCACTCTGTGTCGGAGTCTCCGGGGGAAGACGGTGACCATCCC
CTGCACCGCCAGCAGTGGCAGCATTGCCAACAACTATGTGCAGTGGTACCAGCAGCGCCCG
GGCAGTGCCCCCACCACTGTGATCTATGAGGATAGTCAAAGACCCTCTGGGGTCCCTGATCG
GGTCTCTGGCTCCATCGACAGCTCCTCCAACTCTGCCTCCCTCACCATCTCTGGACTGAAGAC
TGAGGACGAGGCTGATTATTACTGT[redacted]TTCGG
CGGAGGGACCAAGCTGATCGTCCTCGGTCAGCCCAAGGCTGCCCCCTCGGTCACTCTGTTCC
CGCCCTCCTCTGAGGAGCTTCAAGCCAACAAGGCCACACTGGTGTGTCTCATAAGTGACTTCT
ACCCGGGAGCCGTGACAGTGGCCTGGAAGGCAGATAGCAGCCCCGTCAAGGCGGGAGTGG
AGACCACCACACCCTCCAAACAAAGCAACAACAAGTACGCGGCCAGCAGCTATCTGAGCCTG
ACGCCTGAGCAGTGGAAGTCCCACAGAAGCTACAGCTGCCAGGTCACGCATGAAGGGAGCA
CCGTGGAGAAGACAGTGGCCCCTGCAGAATGCTCT

NFMLTQPHSVSESPGKTVTIPCTASSGSIANNFVQWYQQRPGSAPTTVIYEDSQRPSGVPDRVSG
SIDSSSNSASLTISGLKTEDEADYYC[redacted]FGGGTKLIVLGQPKAAPSVTLFPPSSEELQ
ANKATLVCLISDFYPGAVTVAWKADSSPVKAGVETTTPSKQSNNKYAASSYLSLTPEQWKSHRSY
SCQVTHEGSTVEKTVAPAECS

1H_heavy chain

GAGGTGCAGCTGGTACAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTTT
CCTGCAAGGCATCTGGATACACCTTCACCAGCTACTATATGCACTGGGTGCGACAGGCCCCT
GGACAAGGGCTTGAGTGGATGGGA[redacted]
[redacted]AGAGTCACCATAACCGCGGACACGTCTACAGACACAGCCTACATGGAGC
TGAGCAGCCTGAGATCTGAGGACACGGCCGTGTATTACTGTGCGAGA[redacted]
[redacted]TGGGGCCAGGGAACCCTGGTCACCGTCTC
AAGCGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTG
GGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGTGACGGTGTC
GTGGAACTCAGGCGCCCTGACCAGCGGCGTCCACACCTTCCCGGCTGTCCTACAGTCCTCAG
GACTCTACTCCCTCAGCAGCGTAGTGACCGTGCCCTCCAGCAGCTTGGGCACCCAGACCTAC
ATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGACAAGAAAGTTGAGCCCAAATCT
TGT

EVQLVQSGAEVKKPGASVKVSCKASGYTFTSYYMHWVRQAPGQGLEWMG[redacted]
[redacted]RVTITADTSTDTAYMELSSLRSEDTAVYYCAR[redacted]WGQGTLVTVSSAS
TKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSS
VVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSC

2H_light chain

CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCCGTGTCCCCAGGACAGACAGCCAGCATCAC
CTGCTCTGGAGATAAATTGGGGGATAAATTTGCTTCTGGTATCAGCAGAAGCCAGGCCAGTC
CCCTGTTTTGGTCATCTATCTAGATAACAAGCGGCCCTCAGGGATCCCTGAGCGATTCTCTGG
CTCCAACTCTGGGAACACAGCCACTCTGACCATCAGCGGGACCCAGGCTTTGGATGAGGCTG
ACTACTACTGTTTCGGCGGAGGGACCAAGCTGACC
GTCCTAGGTCAGCCCAAGGCTGCCCCCTCGGTCACTCTGTTCCCGCCCTCCTCTGAGGAGCT
TCAAGCCAACAAGGCCACACTGGTGTGTCTCATAAGTGACTTCTACCCGGGAGCTGTGACAG
TGGCCTGGAAGGCAGATAGCAGCCCCGTCAAGGCGGGAGTGGAGACCACCACACCCTCCAA
ACAAAGCAACAACAAGTACGCGGCCAGCAGCTACCTGAGCCTGACGCCTGAGCAGTGGAAGT
CCCACAAAAGCTACAGCTGCCAGGTCACGCATGAAGGGAGCACCGTGGAGAAGACAGTGGC
CCCTACAGAATGTTCA

QSVLTQPPSVSVSPGQTASITCSGDKLGDKFAFWYQQKPGQSPVLVIYLDNKRPSGIPERFSGSN
SGNTATLTISGTQALDEADYYCFGGGTKLTVLGQPKAAPSVTLFPPSSEELQANKAT
LVCLISDFYPGAVTVAWKADSSPVKAGVETTTPSKQSNNKYAASSYLSLTPEQWKSHKSYSCQVT
HEGSTVEKTVAPTECS

2H_heavy chain

CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCCTCGGAGACCCTGTCCCTCA
CCTGCGCTGTCTATGGTGGGTCCTTCAGTGATTACTACTGGAGCTGGATCCGCCAGCCCCCA
GGGAAGGGGCTAGAGTGGATTGGGGAAATCCATCATACTGGAAGCACCAACTACAACCCGTC
CCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAGGAACCAGTTCTCCCTGAGCCTGA
GCTCTGTGACCGCCGCGGACACGGCTGTTTATTACTGTGCGAGATGGGGCCAGGGCACCCTGGTCACCGTCTCAAGCGCCTCCACCAAG
GGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCC
TGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGTGACGGTGTCGTGGAACTCAGGCGC
CCTGACCAGCGGCGTCCACACCTTCCCGGCTGTCCTACAGTCCTCAGGACTCTACTCCCTCA
GCAGCGTAGTGACCGTGCCCTCCAGCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAAT
CACAAGCCCAGCAACACCAAGGTGGACAAGAAAGTTGAGCCCAAATCTTGT

QVQLQQWGAGLLKPSETLSLTCAVYGGSFSDYYWSWIRQPPGKGLEWIGEIHHSGSTNYNPSLK
SRVTISVDTSRNQFSLSLSSVTAADTAVYYCARWGQGTLVTVSSASTKGPSVFP
LAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSS
LGTQTYICNVNHKPSNTKVDKKVEPKSC

Fig. 3

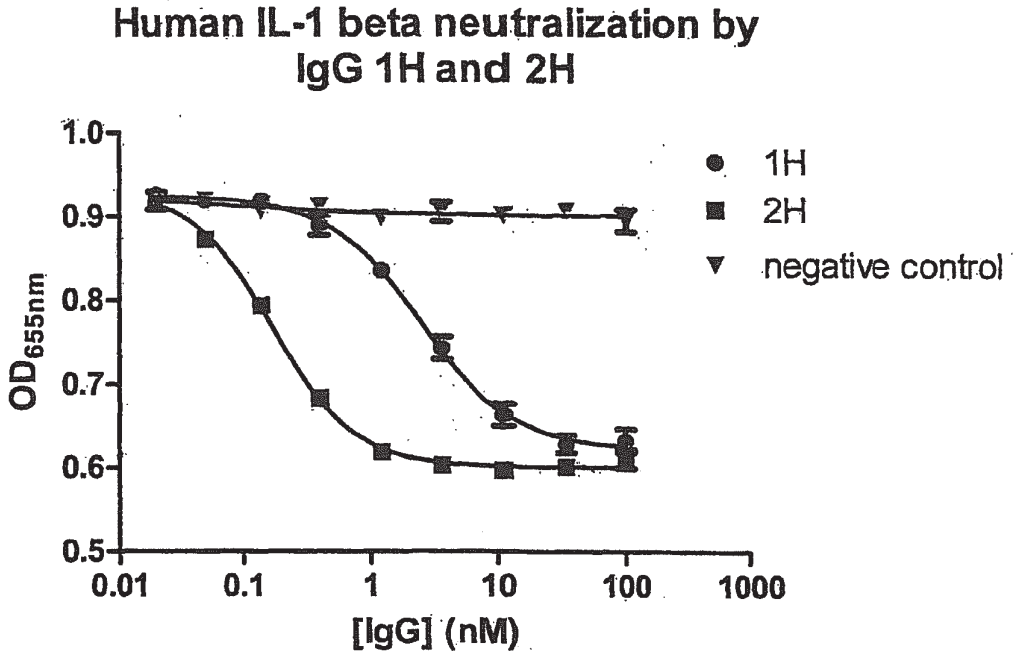

Human IL-1 beta neutralization by IgG 1H and 2H
1.0
0.9
0.8
0.7
0.6
0.5
OD655nm
0.01
0.1
1
10
100
1000
[IgG] (nM)
1H
2H
negative control

Fig. 4

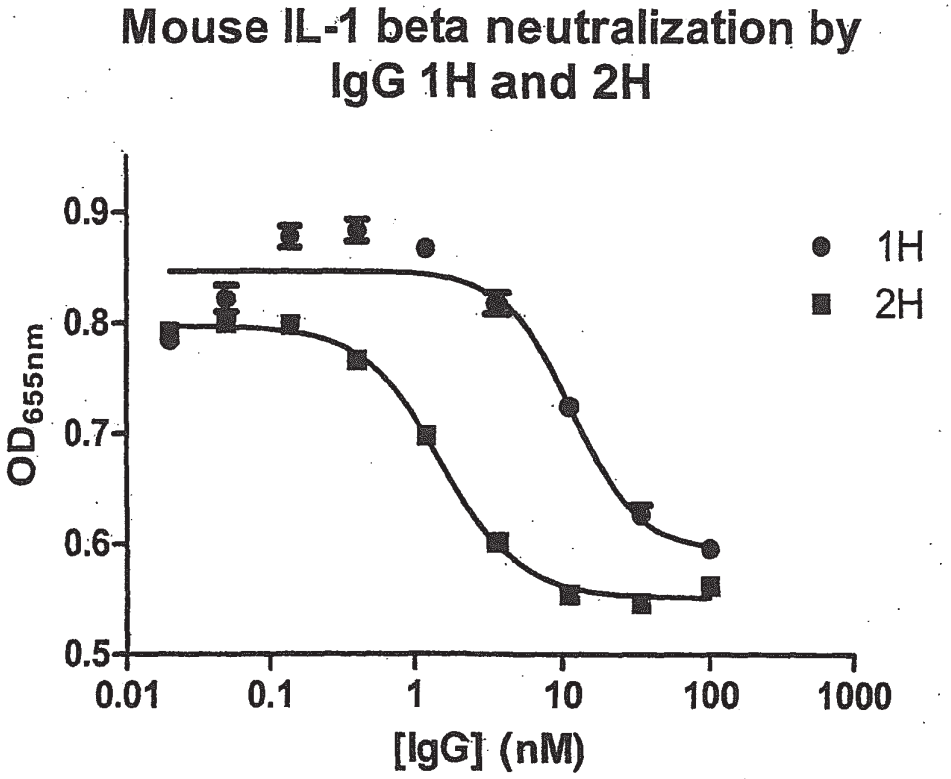

Mouse IL-1 beta neutralization by IgG 1H and 2H
0.9
0.8
0.7
0.6
0.5
OD655nm
0.01
0.1
1
10
100
1000
[IgG] (nM)
1H
2H

Fig. 5

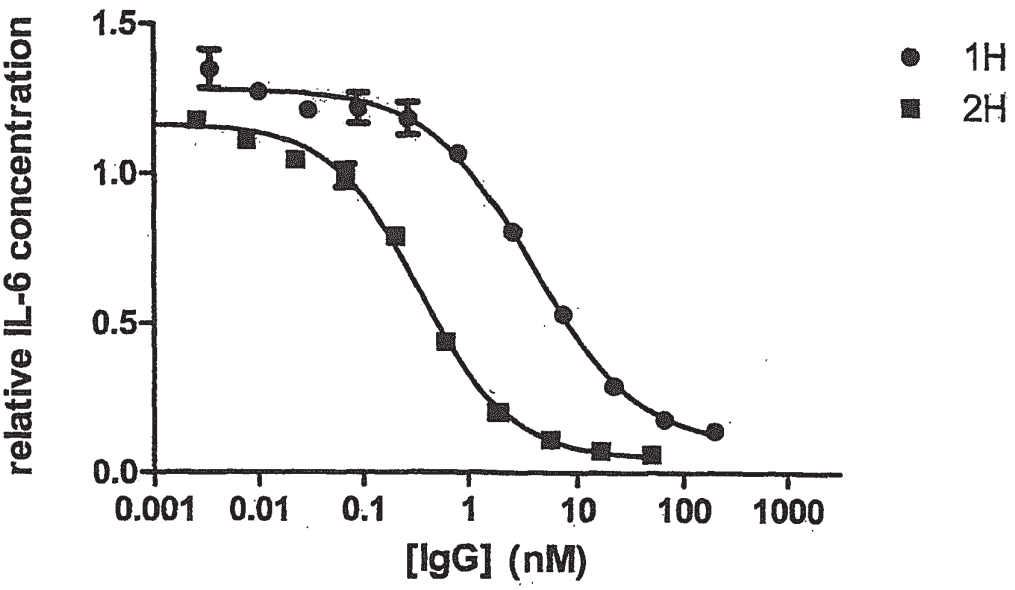

relative IL-6 concentration
1.5
1.0
0.5
0.0
0.001
0.01
0.1
1
10
100
1000
[IgG] (nM)
1H
2H

Fig. 6

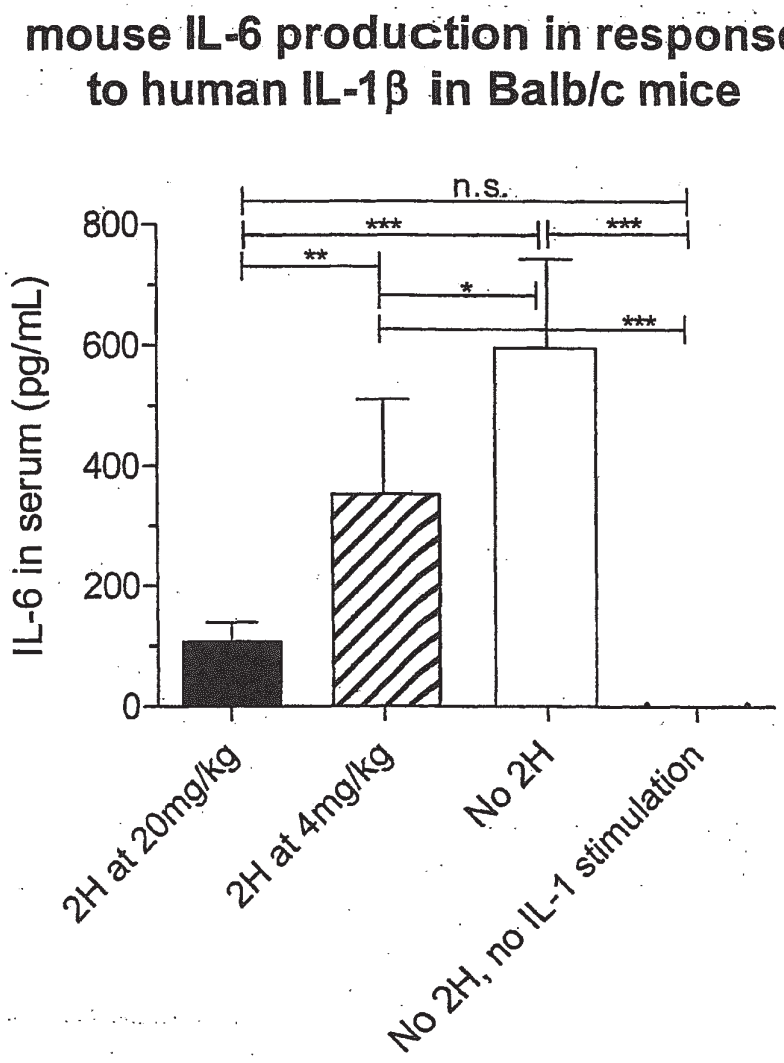

mouse IL-6 production in response to human IL-1β in Balb/c mice
IL-6 in serum (pg/mL)
800
600
400
200
0
n.s.
***
***
**
*
***
2H at 20mg/kg
2H at 4mg/kg
No 2H
No 2H, no IL-1 stimulation

Fig. 7

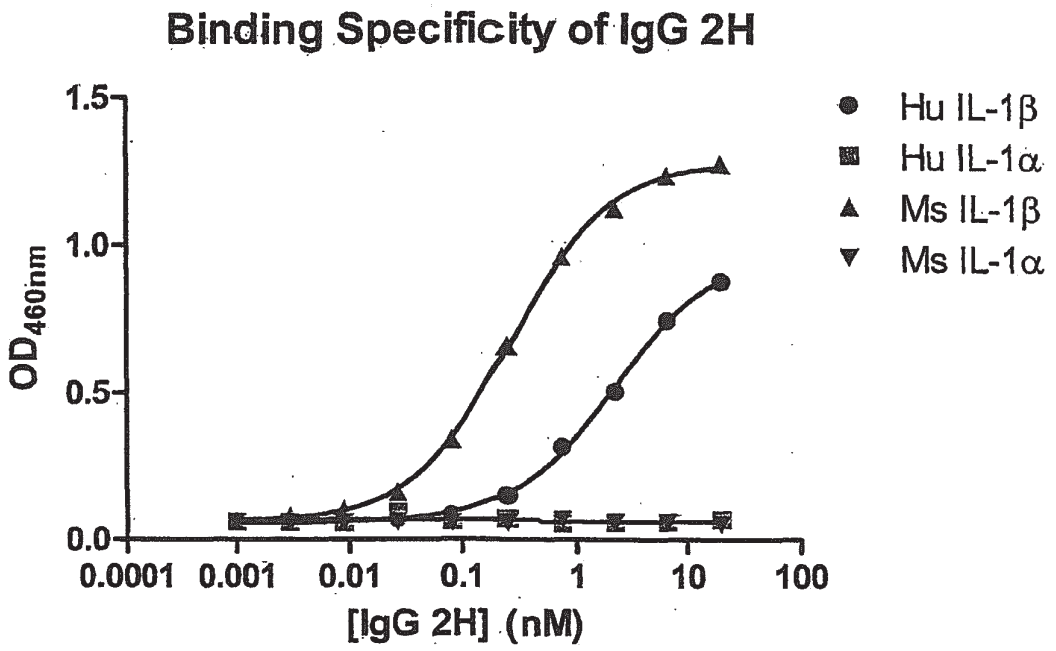
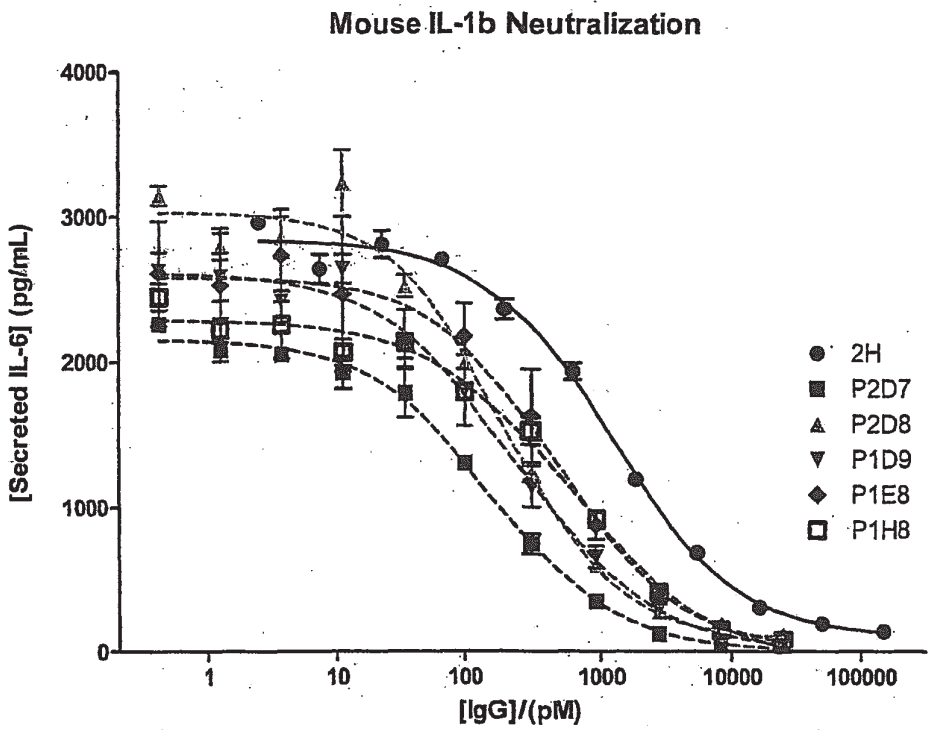
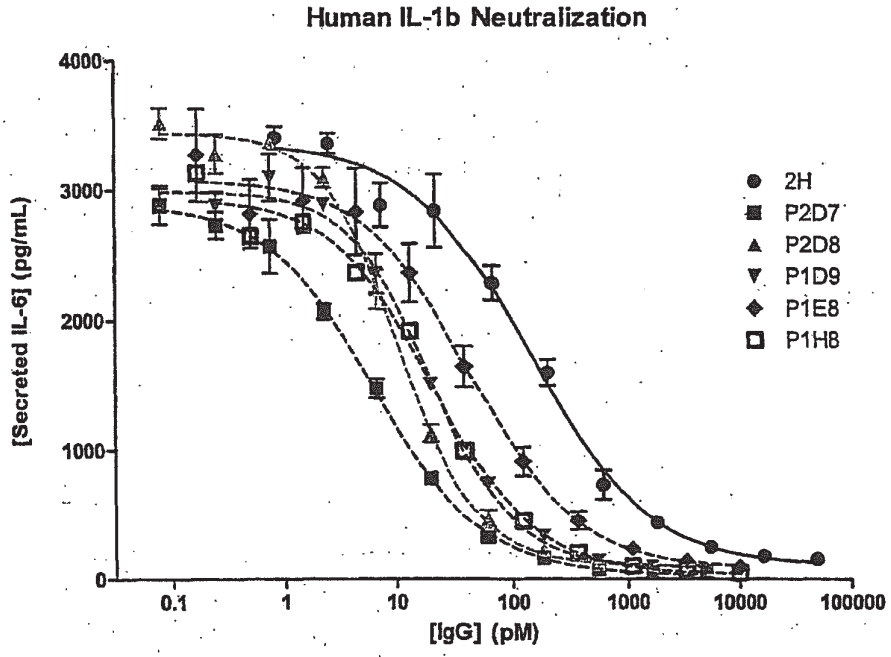

Binding Specificity of IgG 2H
1.5
1.0
0.5
0.0
OD460nm
0.0001
0.001
0.01
0.1
1
10
100
[IgG 2H] (nM)
Hu IL-1β
Hu IL-1α
Ms IL-1β
Ms IL-1α

Fig. 8



	2H	P2D7	P2D8	P1D9	P1E8	P1H8
EC50	1246	158.4	197.4	240.9	479.1	623.2

Fig. 9



	2H	P2D7	P2D8	P1D9	P1E8	P1H8
EC50	147.9	6.533	10.99	20.71	45.33	21.48

Fig. 10

- Heavy variable region:

QVQLQQWGAGLLKPSETLSLTCAVYGGSFSDYYWSWIRQPPGKGLEWIGEIDHSGSTNYNP
SLKSRVTISVDTSKNQFSLKLSSVTAADTAVYYCARASPSSGWTLDYWGQGTL

- Light variable (identical to P2D7):

QSVLTQPPSVSVSPGQTASITCSGDKLGDKFAFWYQQKPGQSPVLVIYLDNKRPSGIPERFSG
SNSGNTATLTISGTQALDEADYYCYAWADTYEVFGGGTK

With: ..... CDR1, _____CDR2, ═══ CDR3.

Fig. 11

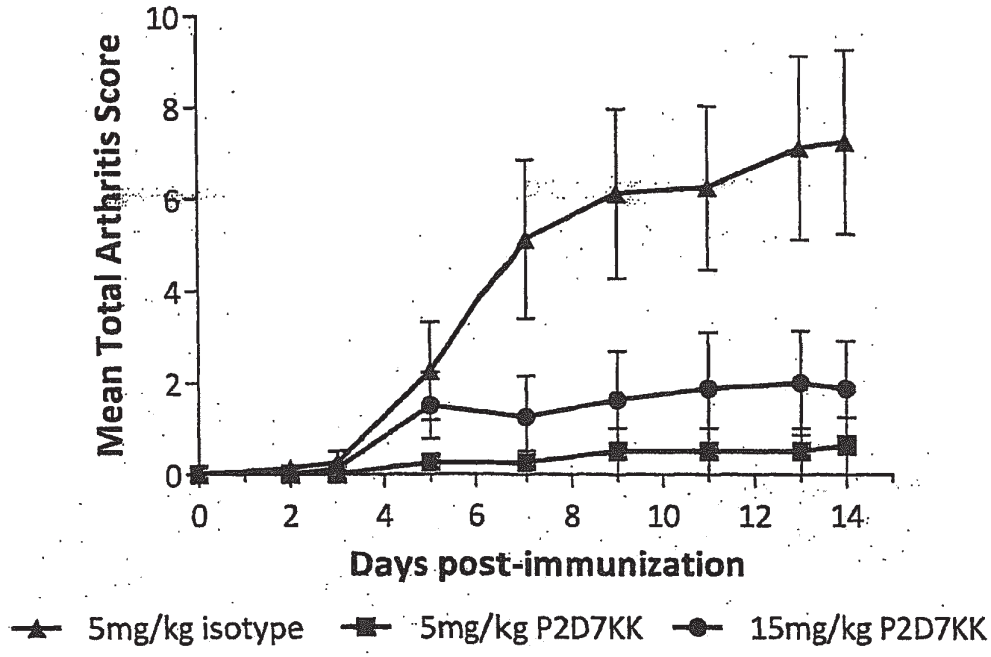

Mean Total Arthritis Score
10
8
6
4
2
0
0
2
4
6
8
10
12
14
Days post-immunization
5mg/kg isotype
5mg/kg P2D7KK
15mg/kg P2D7KK

Fig. 12

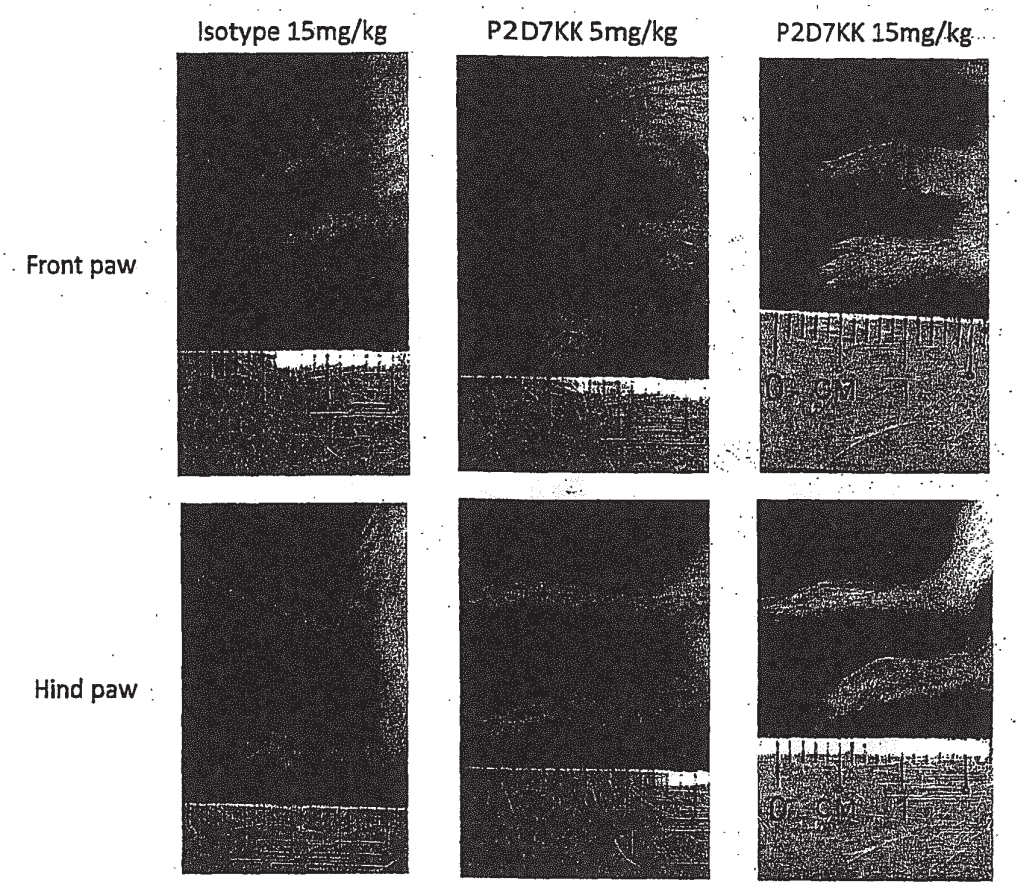

Isotype 15mg/kg
P2D7KK 5mg/kg
P2D7KK 15mg/kg
Front paw
Hind paw

Fig. 13

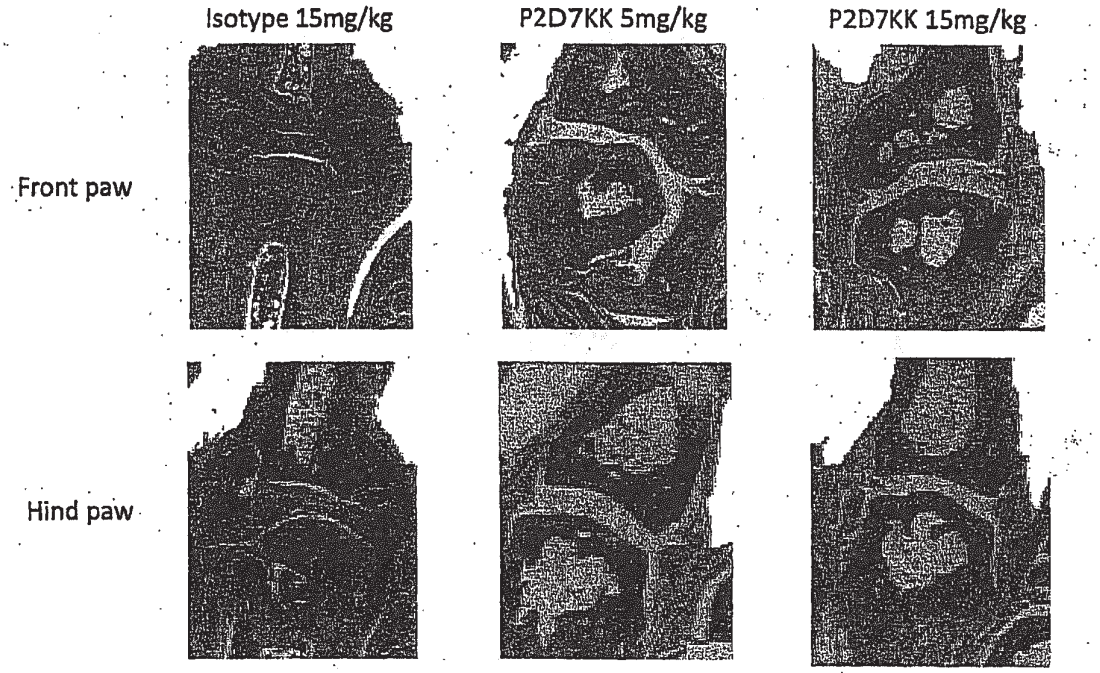

Isotype 15mg/kg
P2D7KK 5mg/kg
P2D7KK 15mg/kg
Front paw
Hind paw

Fig. 14

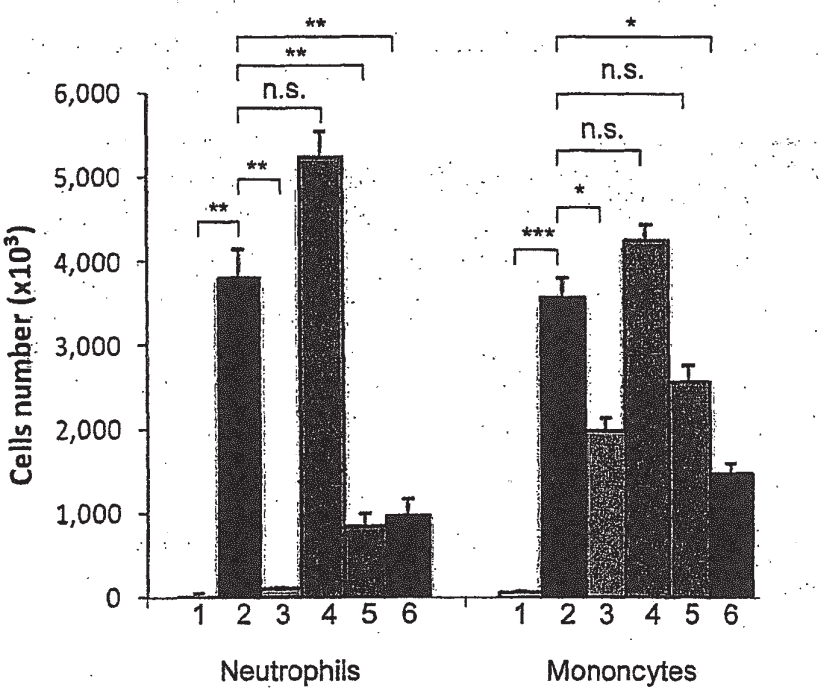

Cells number (x10³)
6,000
5,000
4,000
3,000
2,000
1,000
0
1 2 3 4 5 6
Neutrophils
1 2 3 4 5 6
Mononcytes
**
**
n.s.
**
**
n.s.
n.s.
*
***
*

Fig. 15

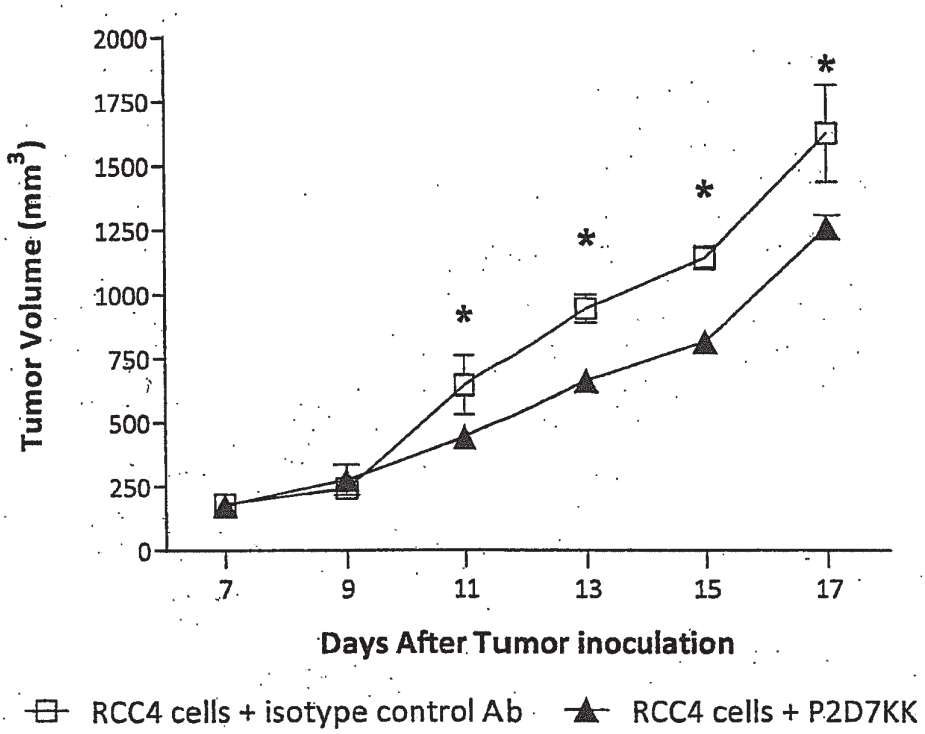

2000
1750
1500
1250
1000
750
500
250
0
Tumor Volume (mm3)
7
9
11
13
15
17
Days After Tumor inoculation
*
*
*
*
RCC4 cells + isotype control Ab
RCC4 cells + P2D7KK

Fig. 16

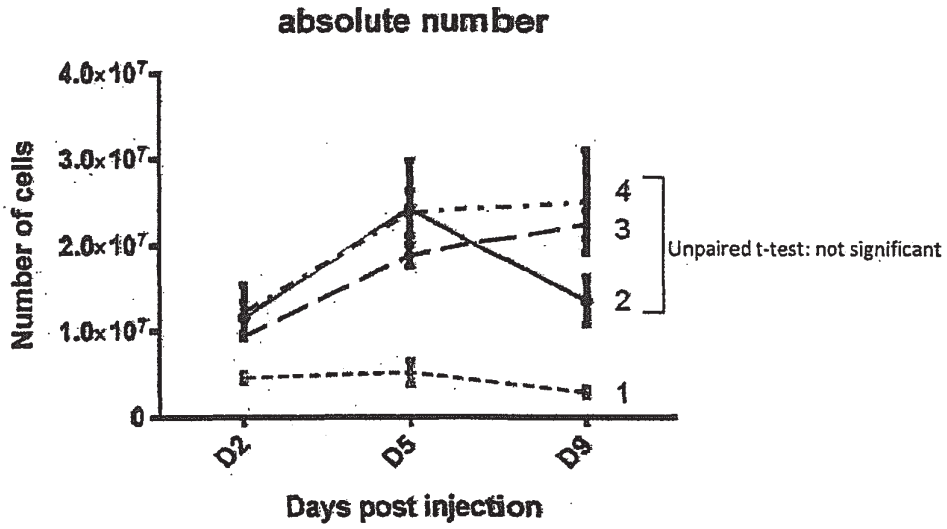
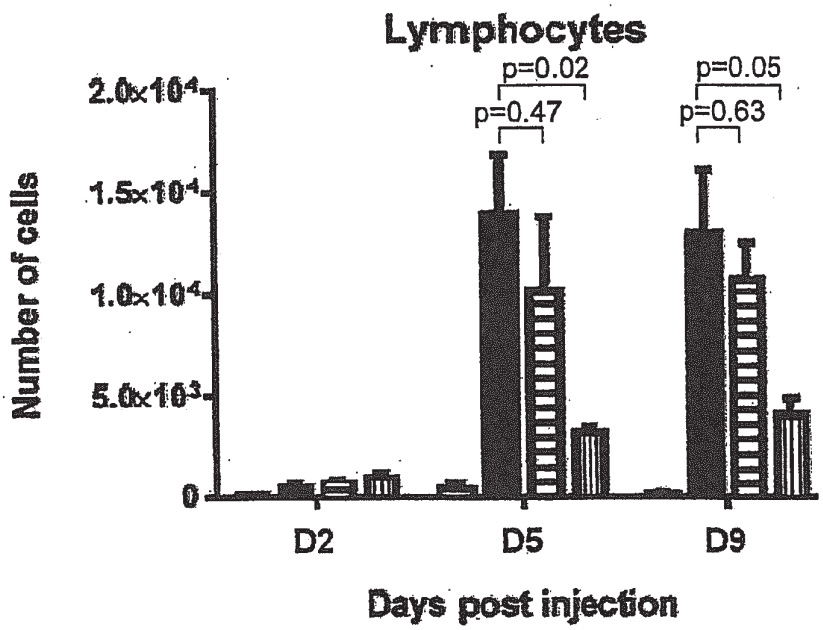

absolute number
4.0x10^7
3.0x10^7
2.0x10^7
1.0x10^7
0
Number of cells
D2
D5
D9
Days post injection
4
3
2
1
Unpaired t-test: not significant

Fig. 17


Lymphocytes
p=0.02
p=0.47
p=0.05
p=0.63
2.0x10⁴
1.5x10⁴
1.0x10⁴
5.0x10³
0
Number of cells
D2
D5
D9
Days post injection