Figure 1

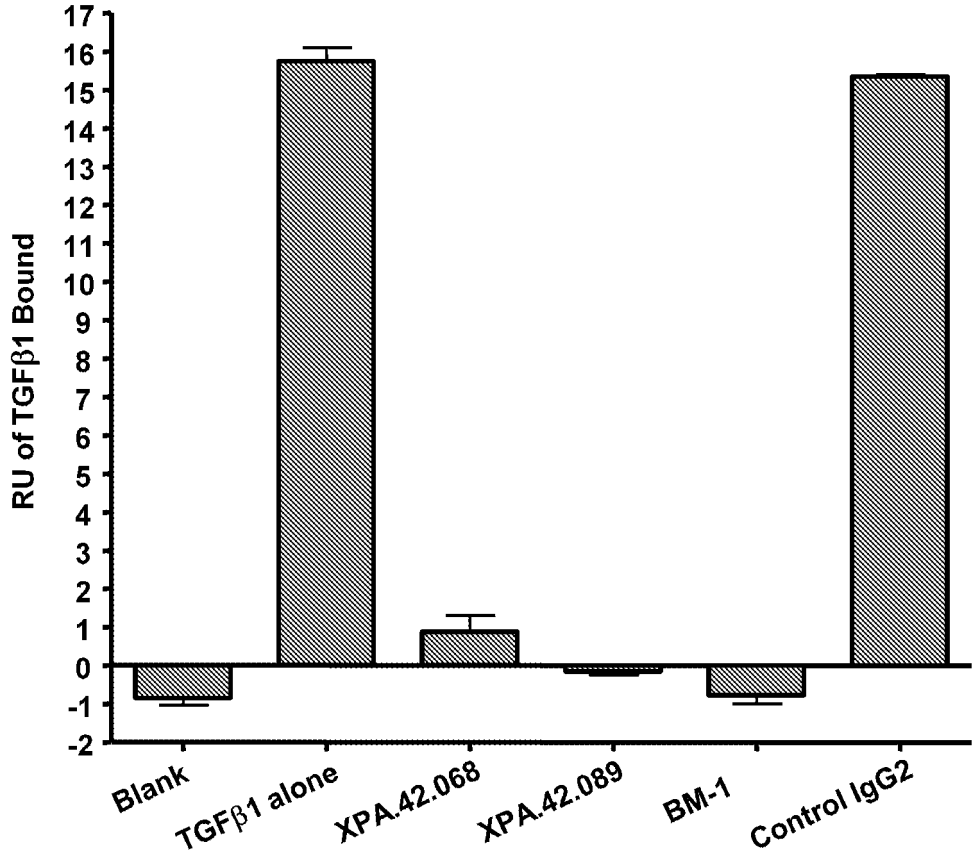
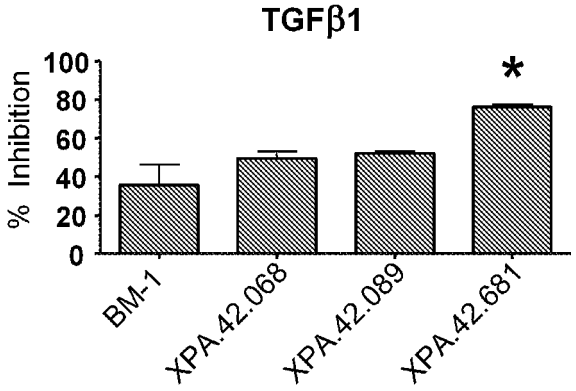
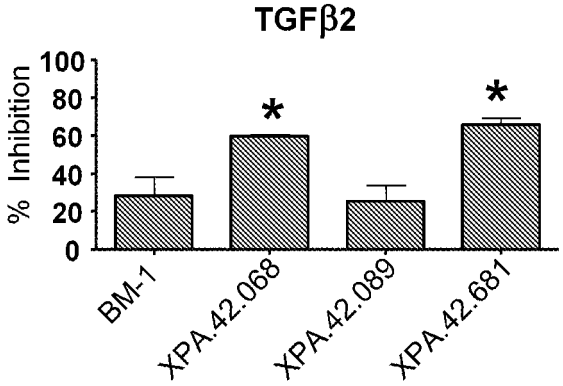

RU of TGFβ1 Bound
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
-1
-2
Blank
TGFβ1 alone
XPA.42.068
XPA.42.089
BM-1
Control IgG2

Figure 2

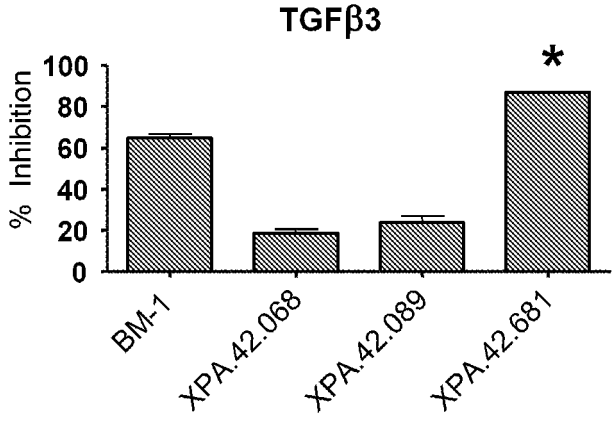
A.



B.



C.



*p<0.05

Figure 3

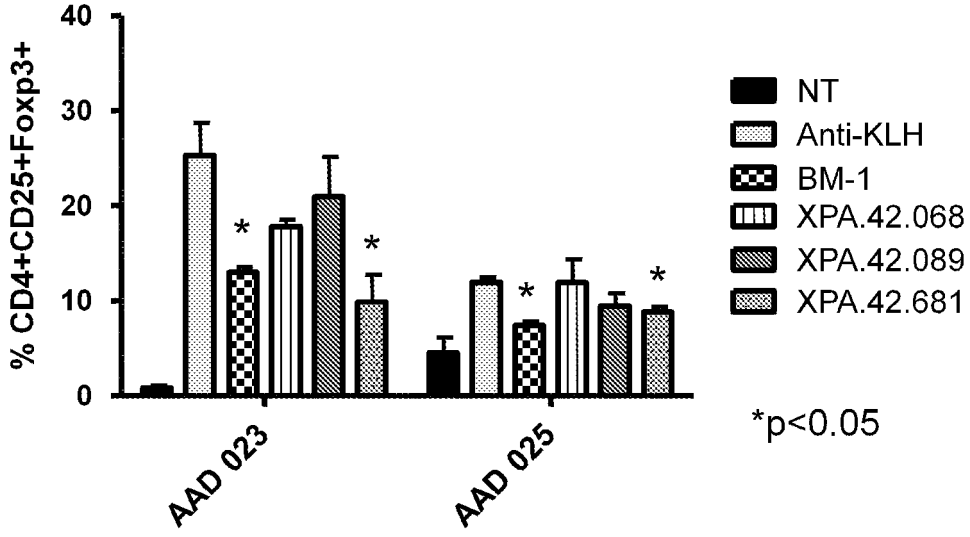

% CD4+CD25+Foxp3+
40
30
20
10
0
*
*
*
*
AAD 023
AAD 025
NT
Anti-KLH
BM-1
XPA.42.068
XPA.42.089
XPA.42.681
*p<0.05

Figure 4

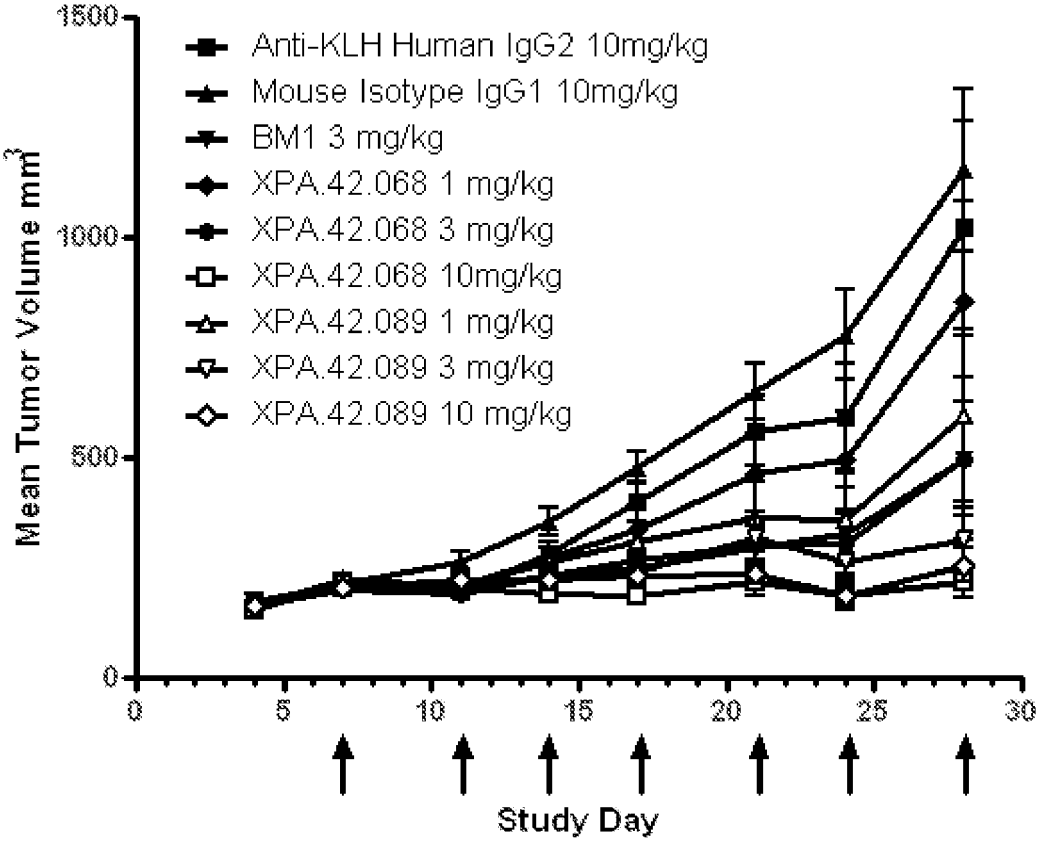

Anti-KLH Human IgG2 10mg/kg
Mouse Isotype IgG1 10mg/kg
BM1 3 mg/kg
XPA.42.068 1 mg/kg
XPA.42.068 3 mg/kg
XPA.42.068 10mg/kg
XPA.42.089 1 mg/kg
XPA.42.089 3 mg/kg
XPA.42.089 10 mg/kg
Mean Tumor Volume mm3
1500
1000
500
0
0
5
10
15
20
25
30
Study Day

Figure 5

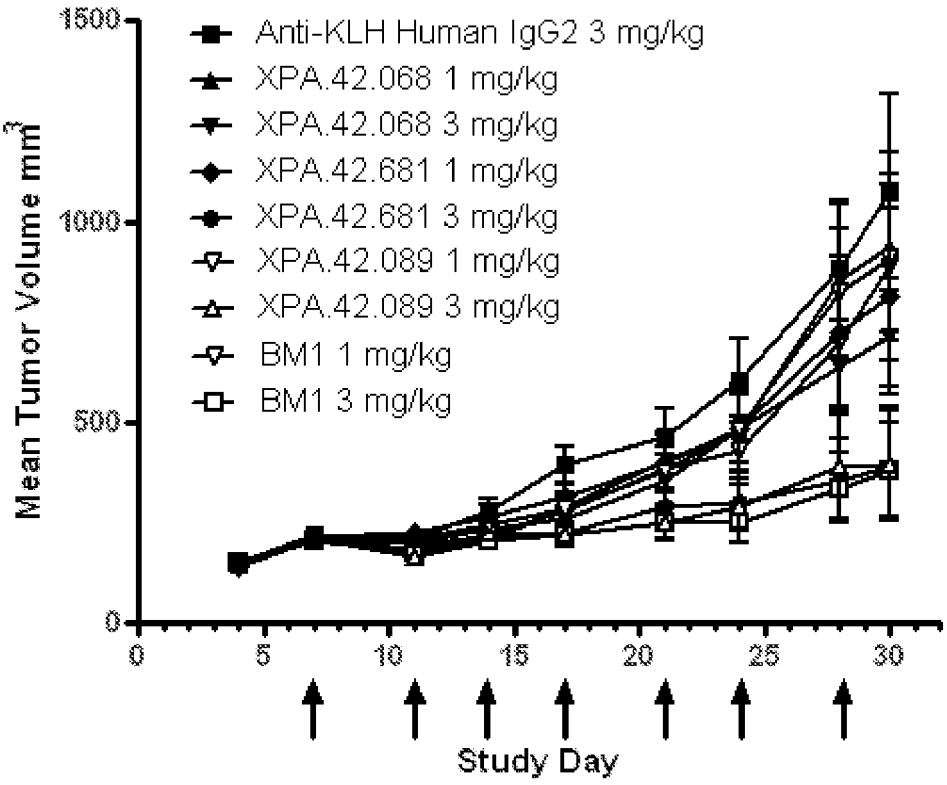

Anti-KLH Human IgG2 3 mg/kg
XPA.42.068 1 mg/kg
XPA.42.068 3 mg/kg
XPA.42.681 1 mg/kg
XPA.42.681 3 mg/kg
XPA.42.089 1 mg/kg
XPA.42.089 3 mg/kg
BM1 1 mg/kg
BM1 3 mg/kg
Mean Tumor Volume mm3
1500
1000
500
0
0
5
10
15
20
25
30
Study Day

Figure 6

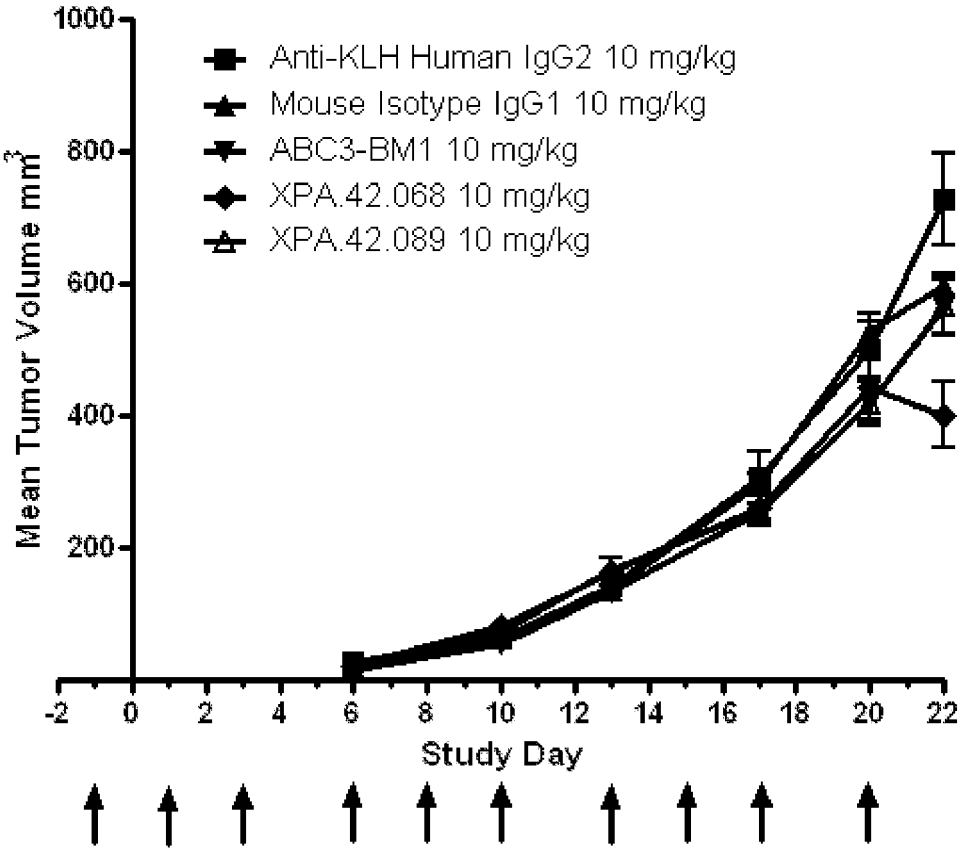

Anti-KLH Human IgG2 10 mg/kg
Mouse Isotype IgG1 10 mg/kg
ABC3-BM1 10 mg/kg
XPA.42.068 10 mg/kg
XPA.42.089 10 mg/kg
Mean Tumor Volume mm3
1000
800
600
400
200
-2
0
2
4
6
8
10
12
14
16
18
20
22
Study Day

Figure 7

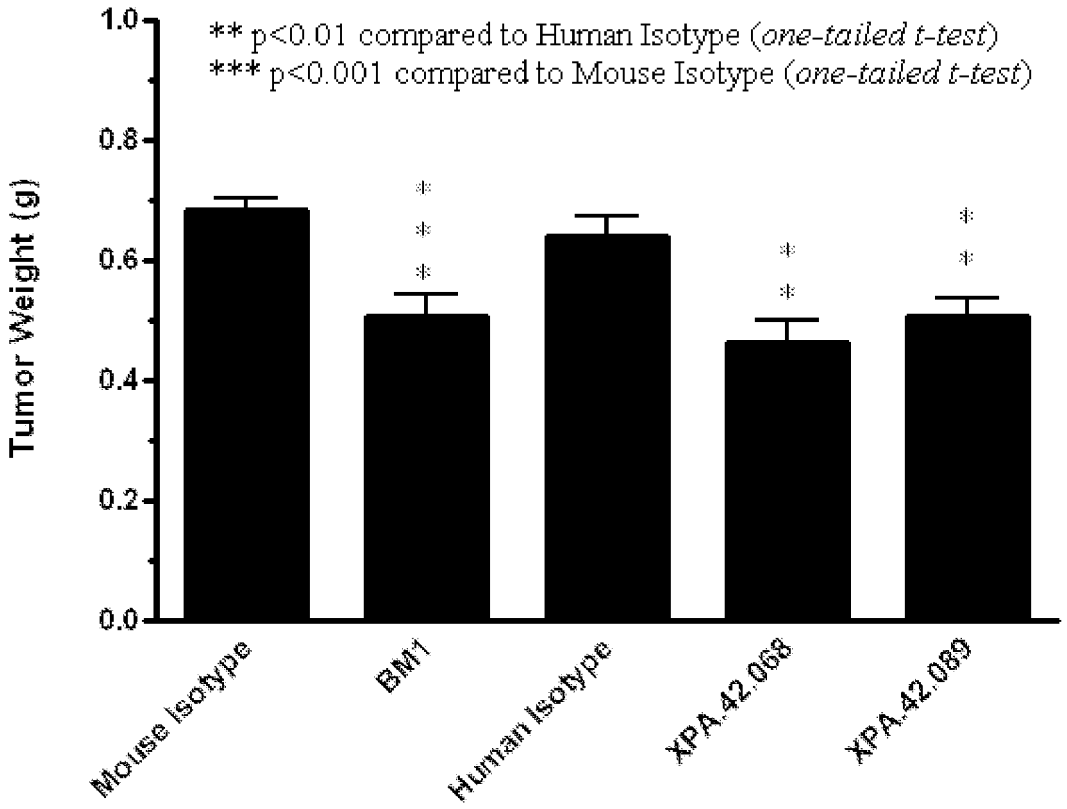

** p<0.01 compared to Human Isotype (one-tailed t-test)
*** p<0.001 compared to Mouse Isotype (one-tailed t-test)
Tumor Weight (g)
1.0
0.8
0.6
0.4
0.2
0.0
Mouse Isotype
BM1
Human Isotype
XPA.42.068
XPA.42.089

Figure 8

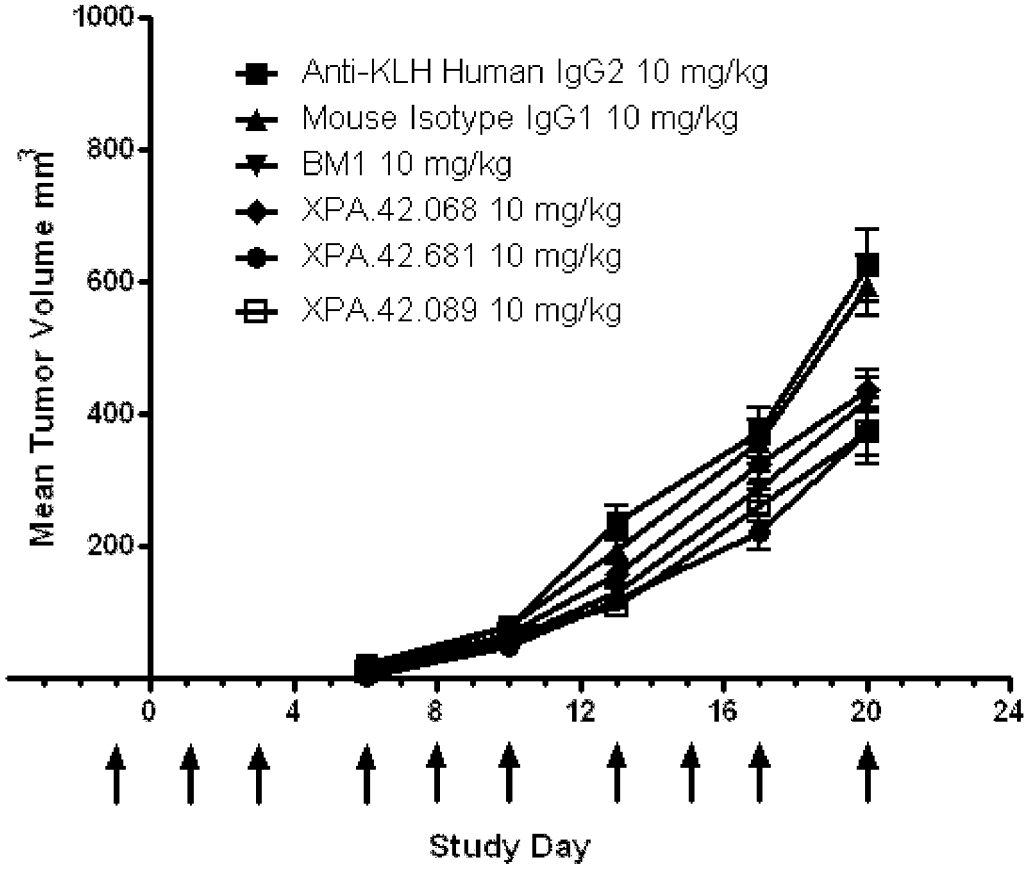

1000
800
600
400
200
Mean Tumor Volume mm3
Anti-KLH Human IgG2 10 mg/kg
Mouse Isotype IgG1 10 mg/kg
BM1 10 mg/kg
XPA.42.068 10 mg/kg
XPA.42.681 10 mg/kg
XPA.42.089 10 mg/kg
0
4
8
12
16
20
24
Study Day

Figure 9

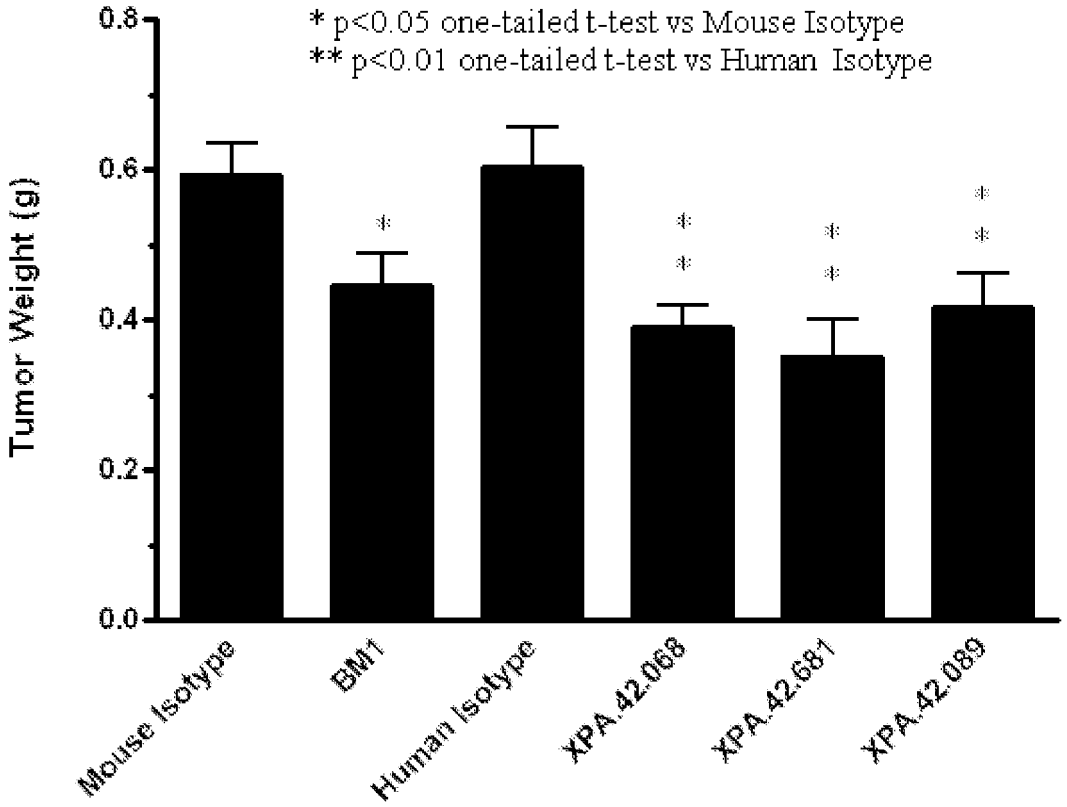

* p<0.05 one-tailed t-test vs Mouse Isotype
** p<0.01 one-tailed t-test vs Human Isotype
Tumor Weight (g)
0.8
0.6
0.4
0.2
0.0
Mouse Isotype
BM1
Human Isotype
XPA.42.068
XPA.42.681
XPA.42.089

Figure 10

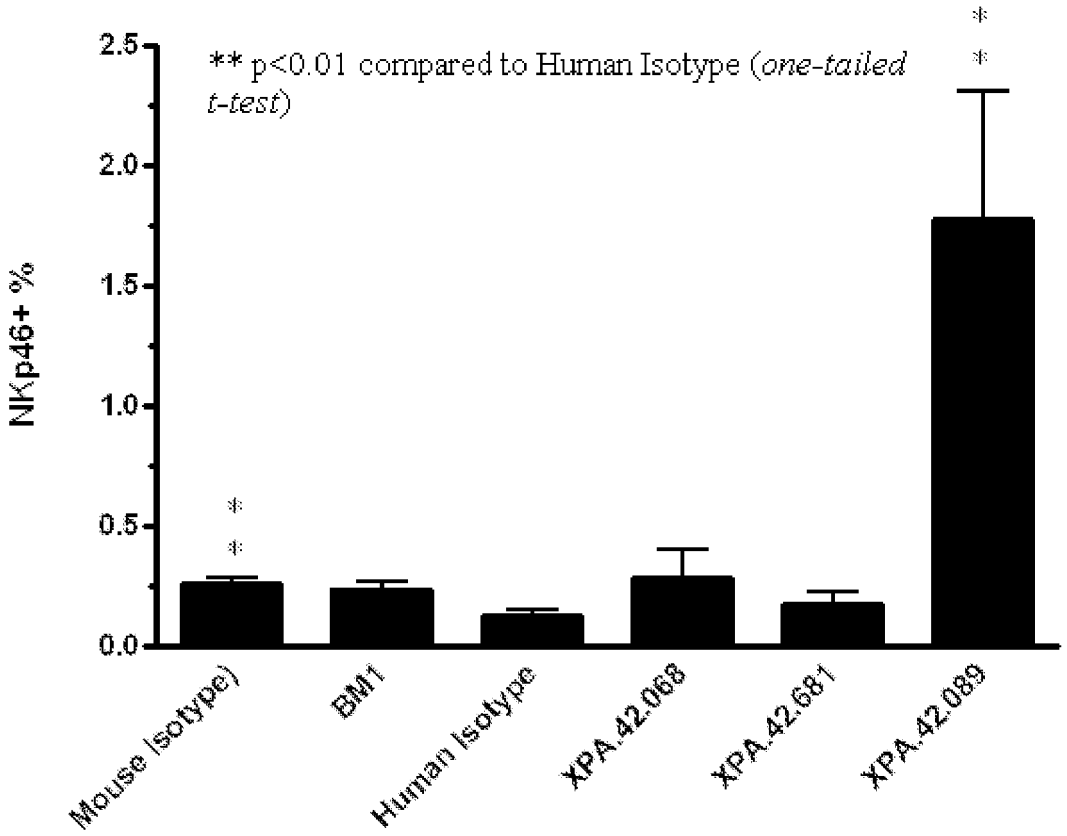

** p<0.01 compared to Human Isotype (one-tailed t-test)
NKp46+ %
2.5
2.0
1.5
1.0
0.5
0.0
Mouse Isotype)
BM1
Human Isotype
XPA.42.068
XPA.42.681
XPA.42.089

Figure 11

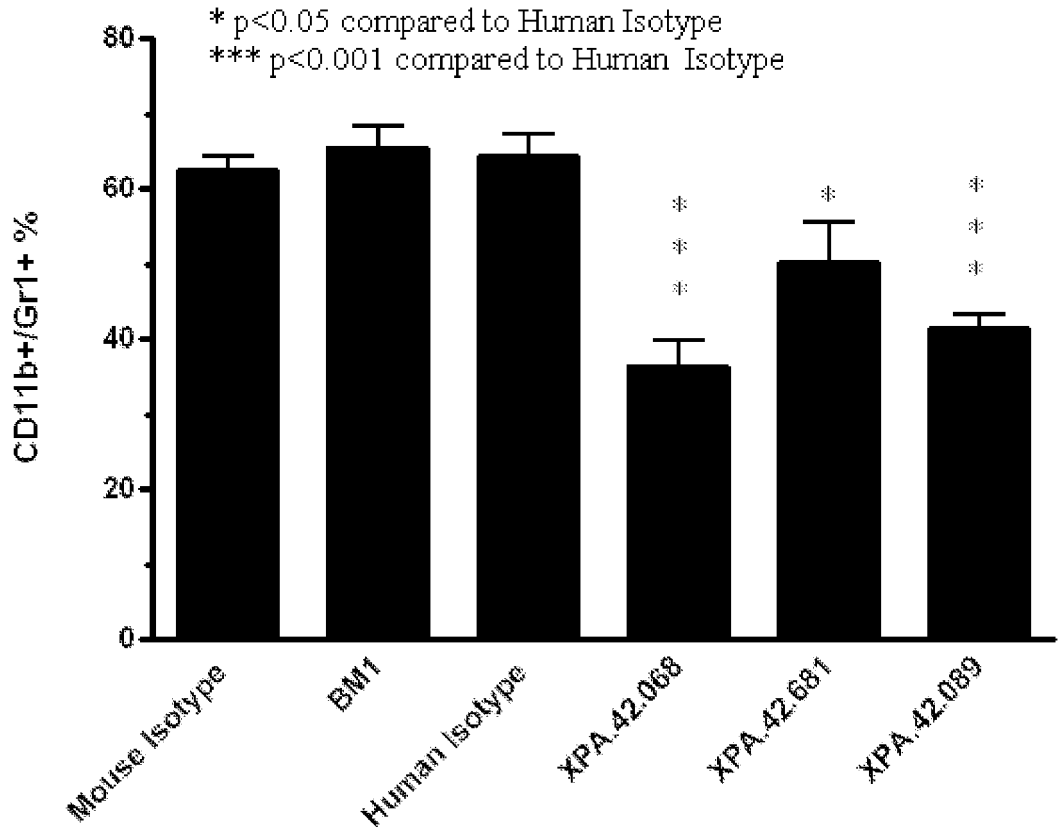

* p<0.05 compared to Human Isotype
*** p<0.001 compared to Human Isotype
CD11b+/Gr1+ %
80
60
40
20
0
Mouse Isotype
BM1
Human Isotype
XPA.42.068
XPA.42.681
XPA.42.089

Figure 12

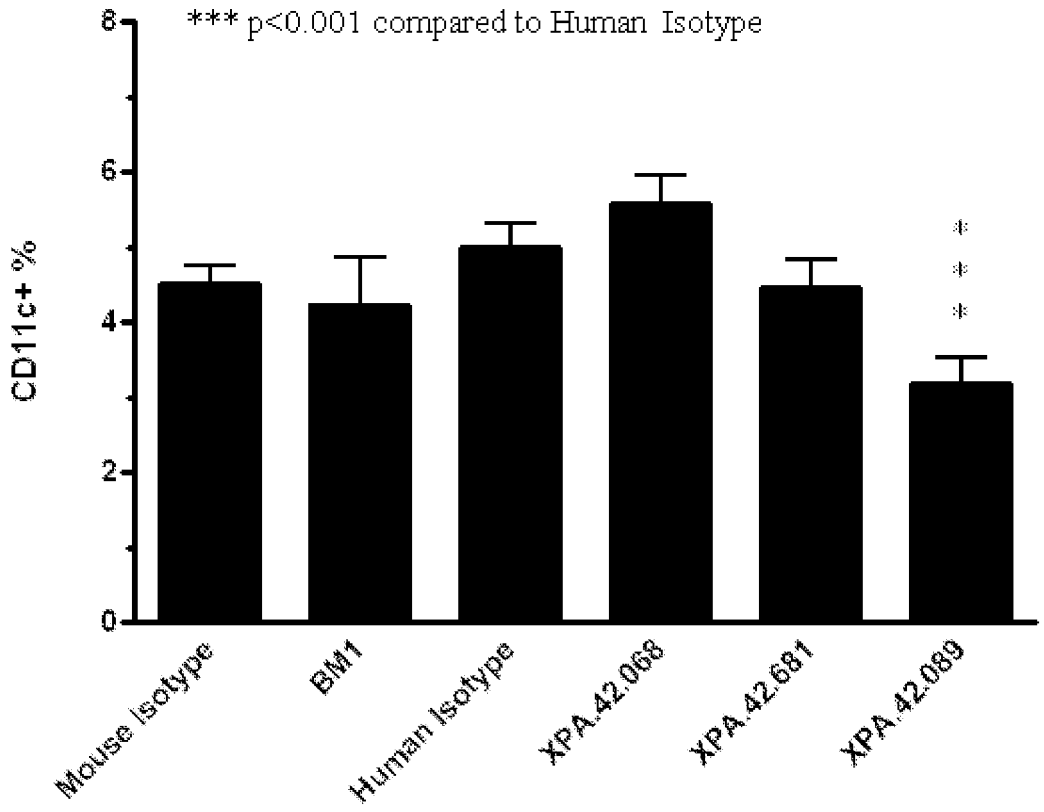

*** p<0.001 compared to Human Isotype
CD11c+ %
0
2
4
6
8
*
*
*
Mouse Isotype
BM1
Human Isotype
XPA.42.068
XPA.42.681
XPA.42.089

Figure 13

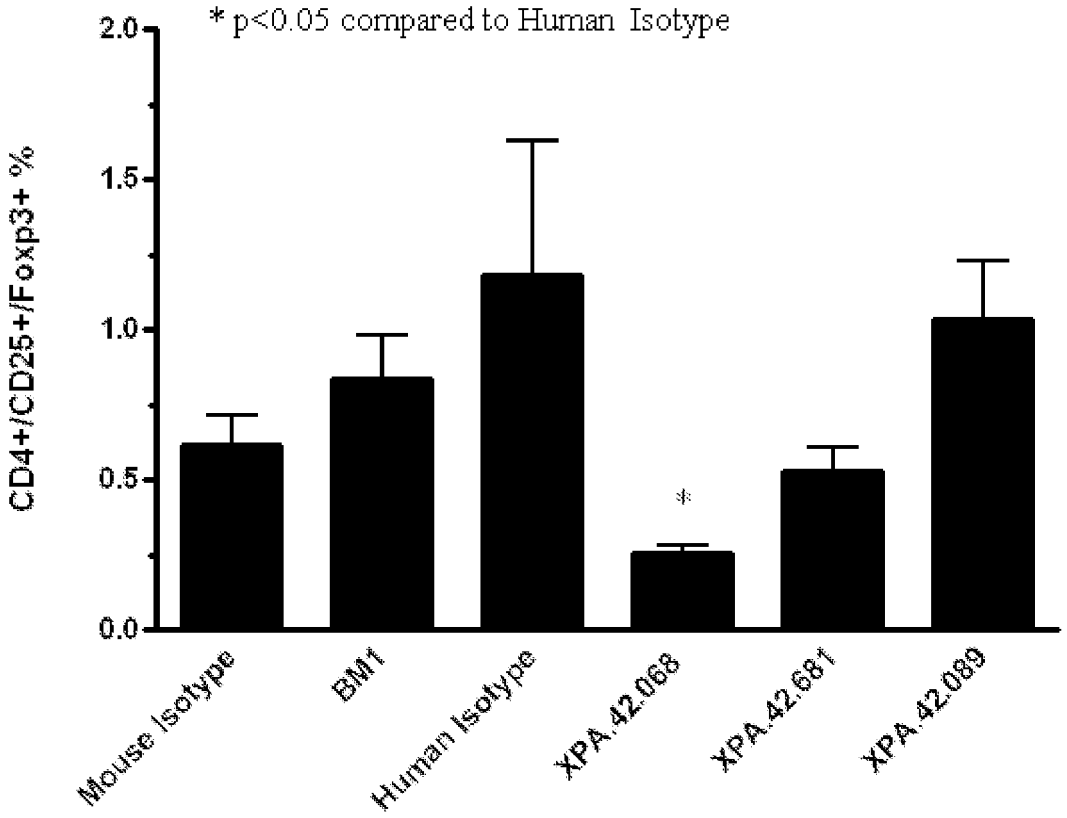

* p<0.05 compared to Human Isotype
CD4+/CD25+/Foxp3+ %
2.0
1.5
1.0
0.5
0.0
*
Mouse Isotype
BM1
Human Isotype
XPA.42.068
XPA.42.681
XPA.42.089

Figure 14

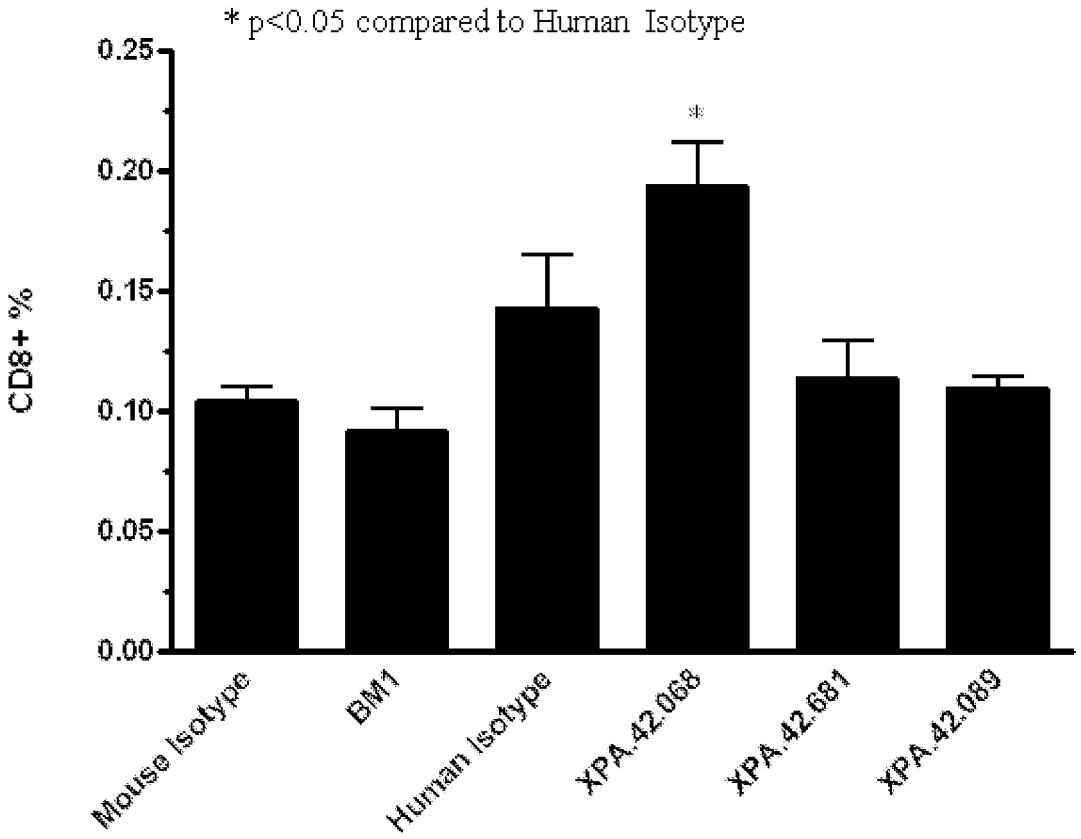

* p<0.05 compared to Human Isotype
CD8+ %
0.25
0.20
0.15
0.10
0.05
0.00
*
Mouse Isotype
BM1
Human Isotype
XPA.42.068
XPA.42.681
XPA.42.089

Figure 15

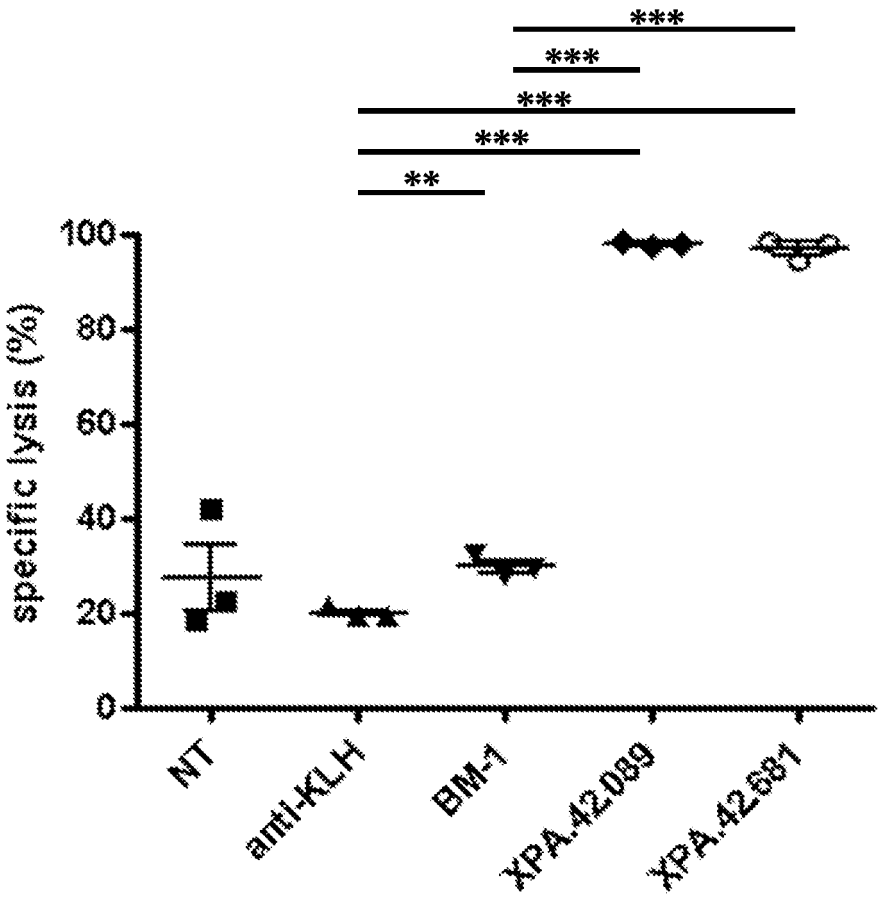

***
***
***
***
**
100
80
60
40
20
0
specific lysis (%)
NT
anti-KLH
BM-1
XPA.42089
XPA.42681

Figure 16

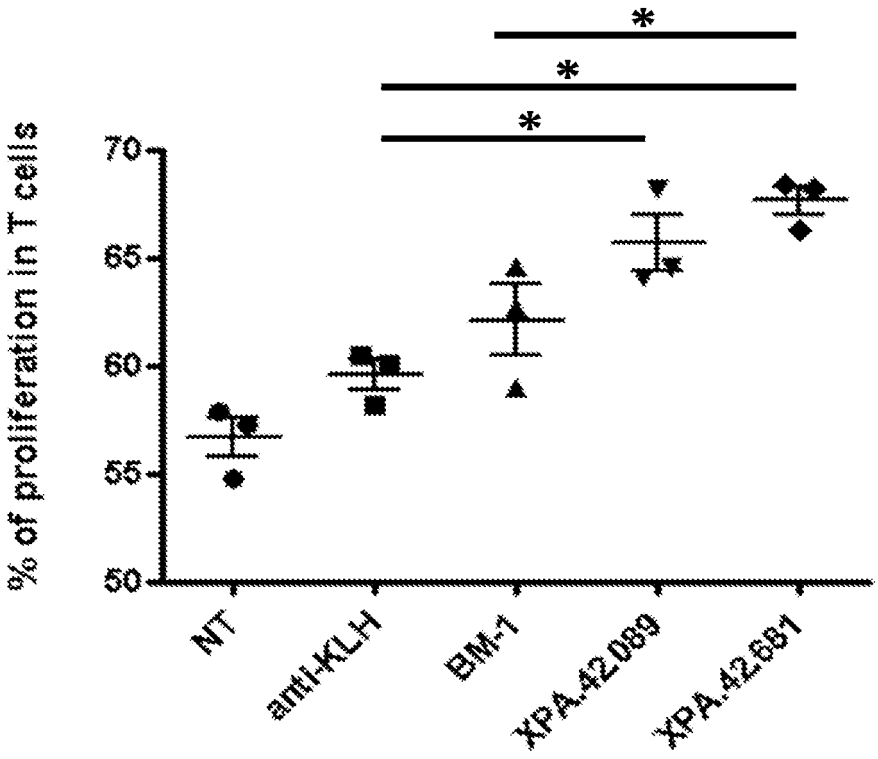

*
*
*
% of proliferation in T cells
70
65
60
55
50
NT
anti-KLH
BM-1
XPA.42.089
XPA.42.681

Figure 17

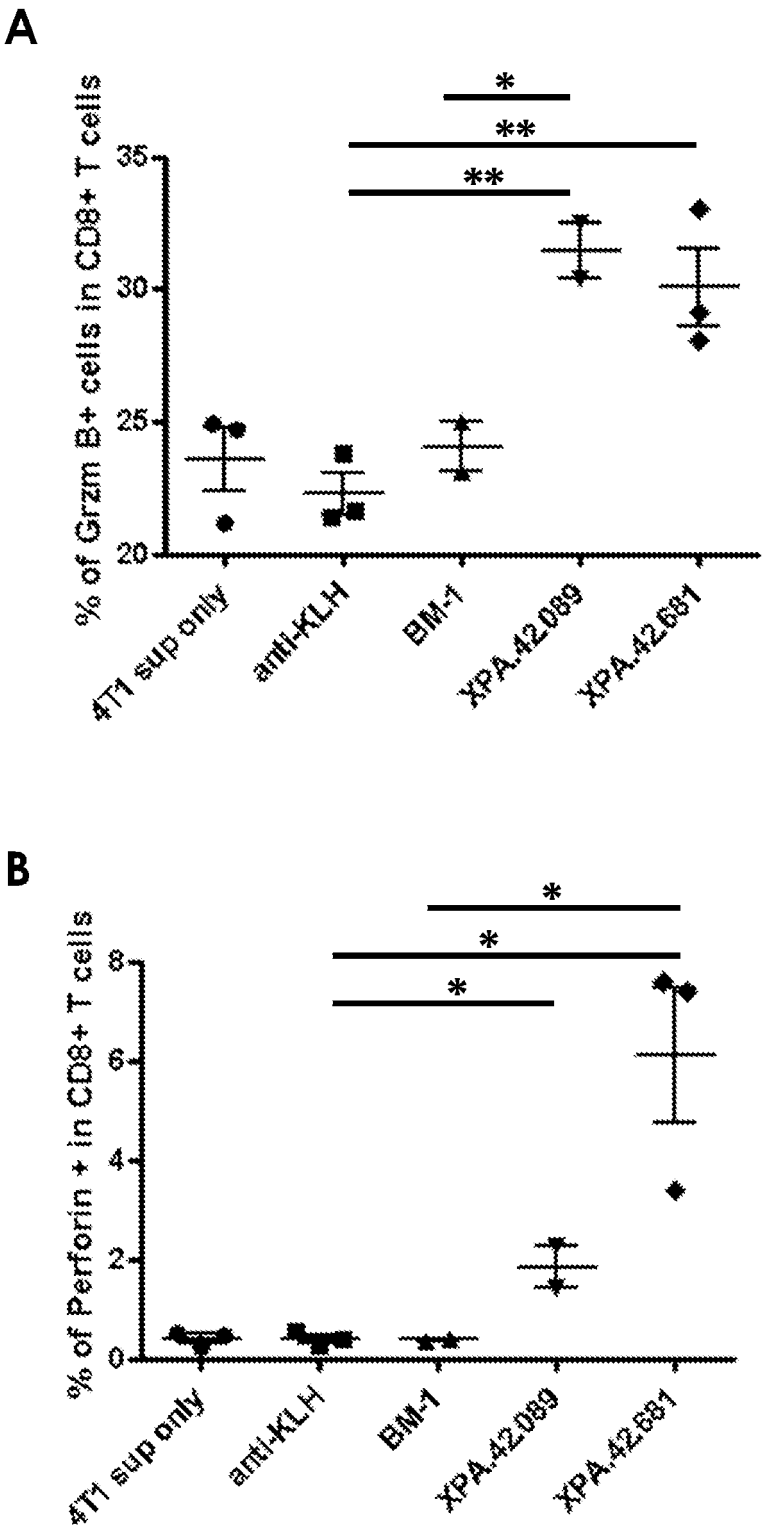

A
% of Grzm B+ cells in CD8+ T cells
35
30
25
20
*
**
**
4T1 sup only
anti-KLH
BM-1
XPA.42.089
XPA.42.681
B
% of Perforin + in CD8+ T cells
8
6
4
2
0
*
*
*
4T1 sup only
anti-KLH
BM-1
XPA.42.089
XPA.42.681

Figure 18

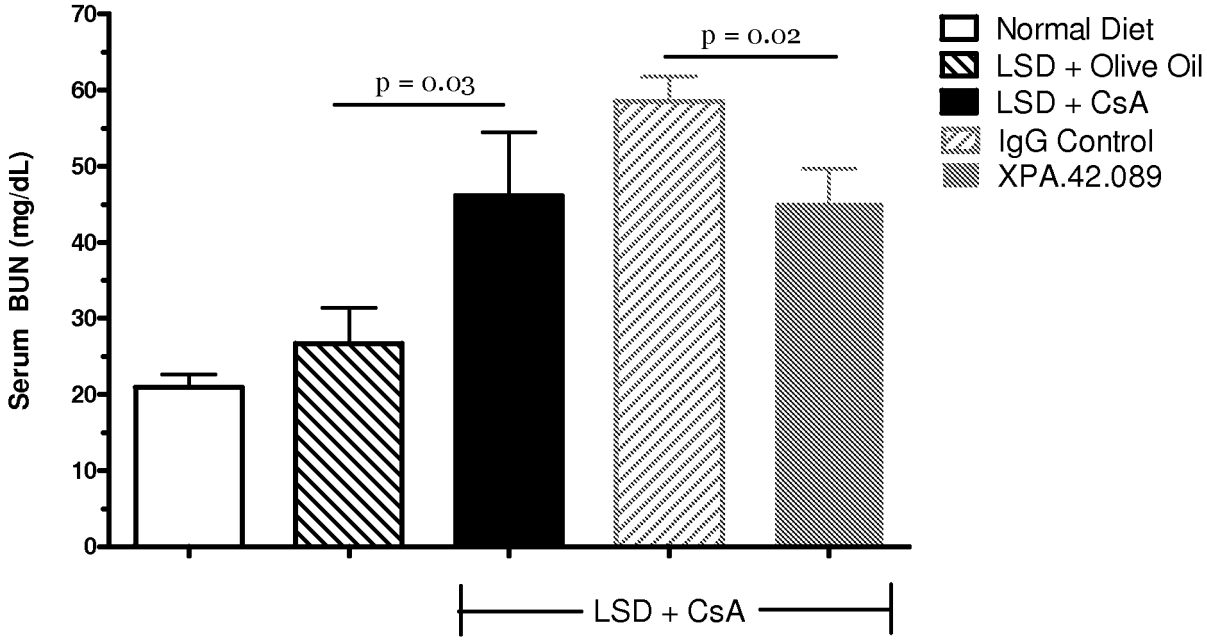

Serum BUN (mg/dL)
70
60
50
40
30
20
10
0
p = 0.03
p = 0.02
LSD + CsA
Normal Diet
LSD + Olive Oil
LSD + CsA
IgG Control
XPA.42.089

Figure 19

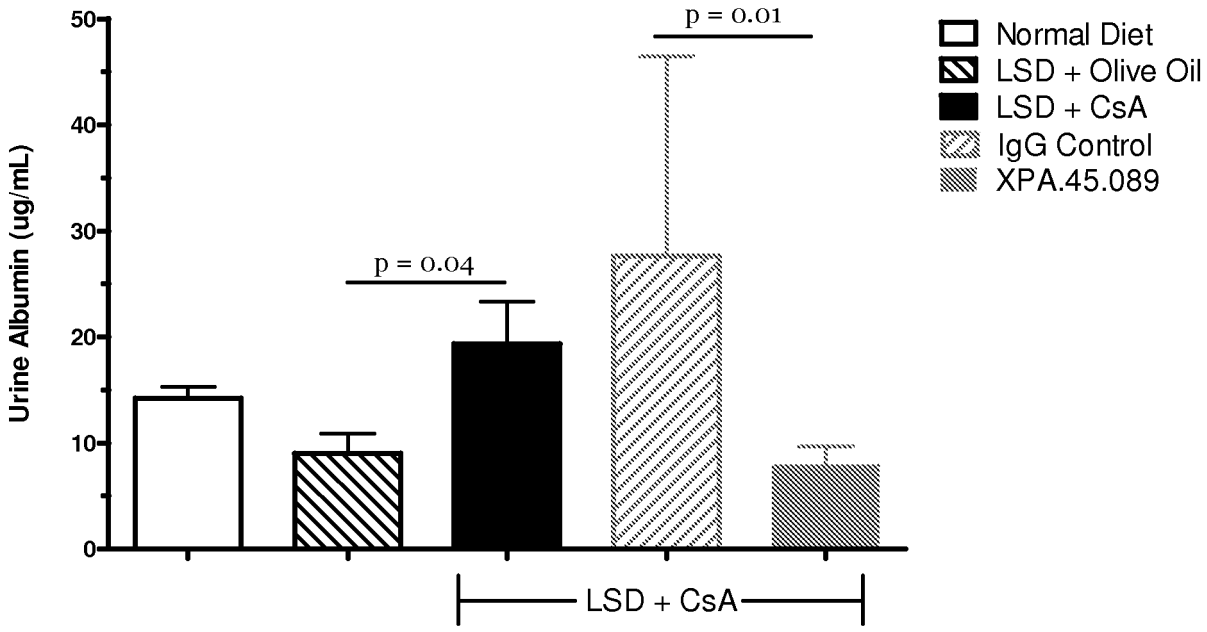

Urine Albumin (ug/mL)
50
40
30
20
10
0
p = 0.04
p = 0.01
LSD + CsA
Normal Diet
LSD + Olive Oil
LSD + CsA
IgG Control
XPA.45.089

Figure 20

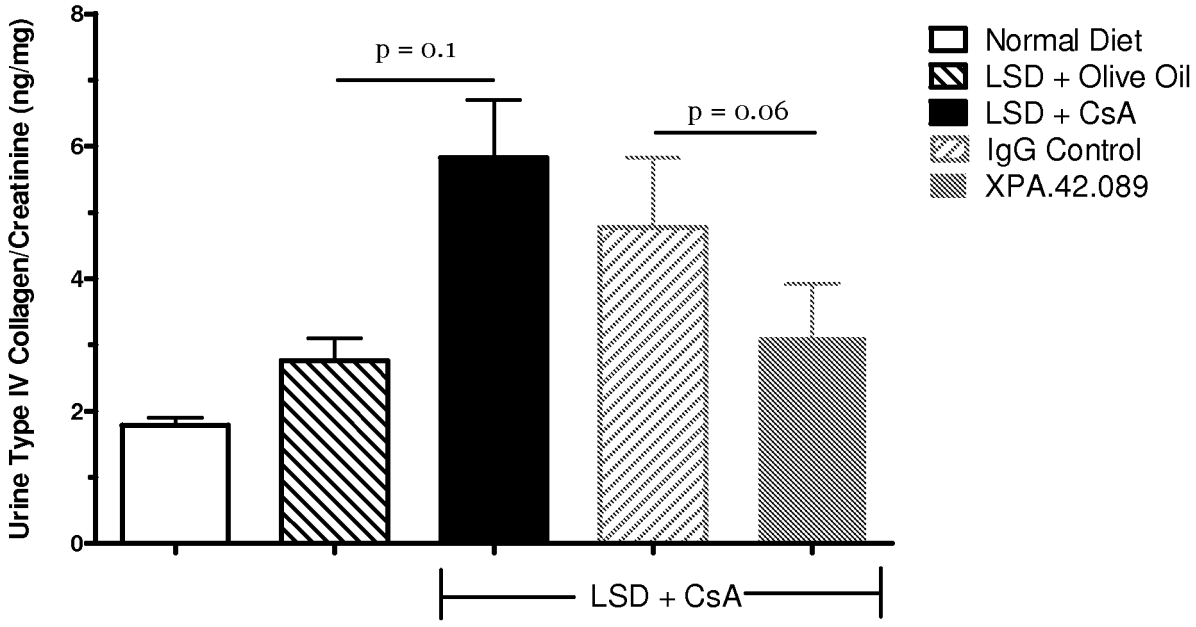
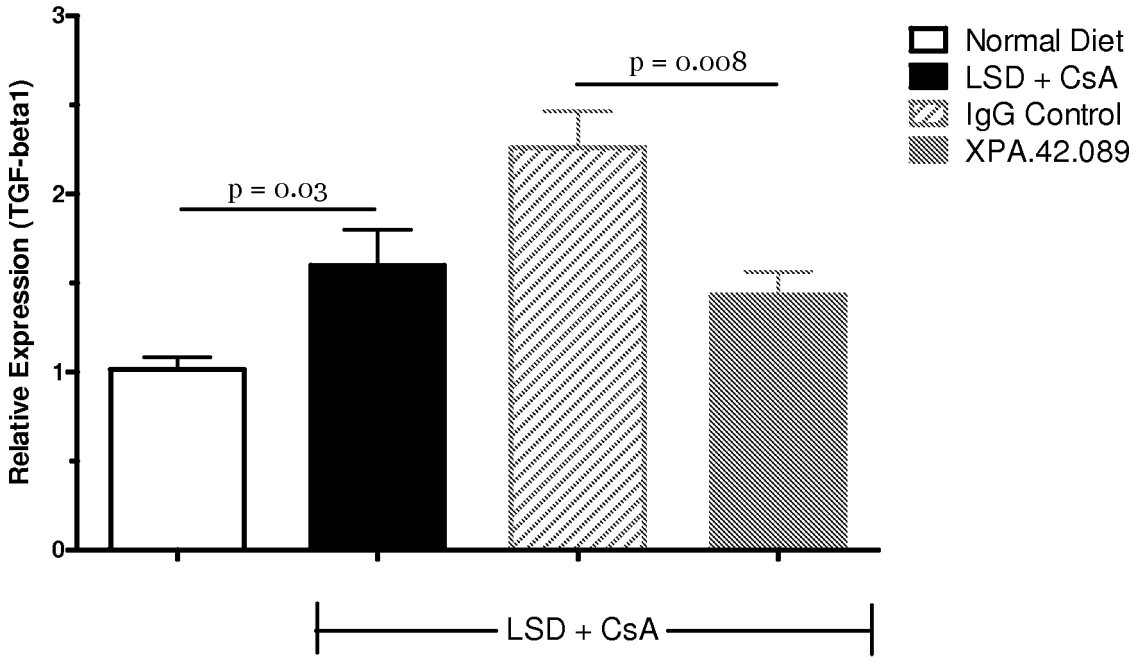

Urine Type IV Collagen/Creatinine (ng/mg)
8
6
4
2
0
p = 0.1
p = 0.06
LSD + CsA
Normal Diet
LSD + Olive Oil
LSD + CsA
IgG Control
XPA.42.089

Figure 21

A



B

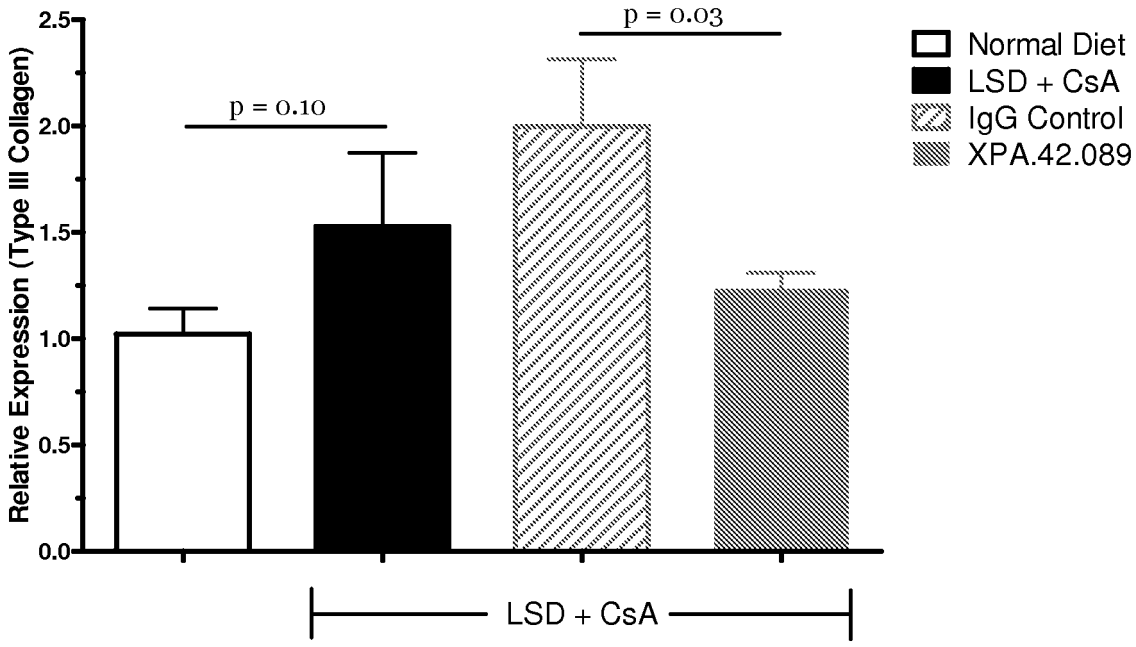
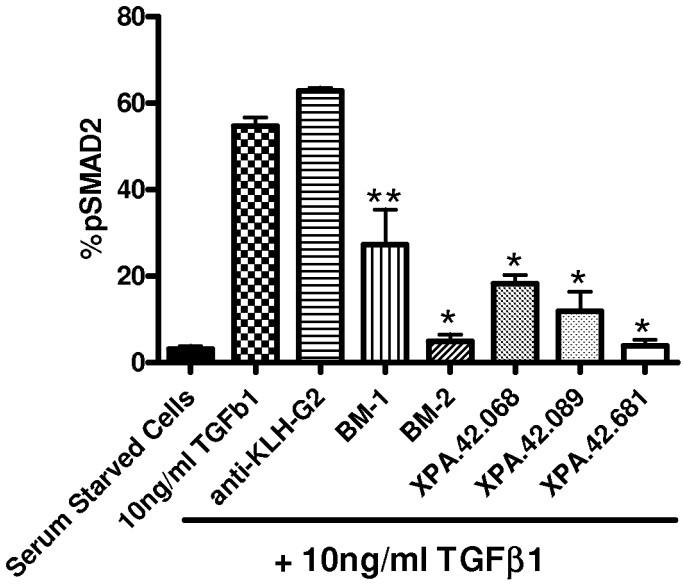


Figure 22



**p<0.05 vs TGFβ1

*p<0.006 vs TGFβ1

Table 1

SEQ ID NO	Clone	Sequence
1	XPA.42.068 heavy chain DNA Sequence	caggttcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60 tcctgcaagg cttctggata caccttcacc ggctactata tgcactgggt gcgacaggcc 120 cctggacaag ggcttgagtg gatgggatgg atcaacccta acactggtgg cacaaactat 180 gcacagaagt ttcagggcag ggtcaccatg accagggaca cgtccatcag cacagcctac 240 atggagctga gcaggctgag atctgacgac acggccgttt attactgtgc gagatcattc 300 ctgtggctgg ttccctctga tgcttttgat atctggggcc aagggacaat ggtcaccgtc 360 tcttca 366
2	XPA.42.068 heavy chain Amino Acid Sequence	QVQLVQSGAE VKKPGASVKV SCKAS**GYTFT GYY**MHWVRQA PGQGLEWMGW **INPNTGGT**NY 60 AQKFQGRVTM TRDTSISTAY MELSRLRSDD TAVYYC**ARSF LWLVPSDAFD I**WGQGTMVTV 120 SS 122
3	XPA.42.068 light chain DNA Sequence	tcttctgagc tgactcagcc accctcagtg tccgtggccc caggagagaa ggccaggatt 60 acctgtgggg ggaataacat tggacgtaaa agtgtacatt ggtaccagca gaggccaggc 120 caggcccctg ttgtggtcct ctactatgat agagtcagac cctcagggat ccctgagcga 180 ttttctggct ccaactctgg gaacacggcc accctgacca tcaccagggt cgaagccggg 240 gatgaggccg actatttttg tcaggtgtgg gataacacta gtgagcatgt ggtcttcggc 300 ggaggcaccc agctgaccgt cctaggc 327
4	XPA.42.068 light chain Amino Acid Sequence	SSELTQPPSV SVAPGEKARI TCGGN**NIGRK S**VHWYQQRPG QAPVVVLY**YD R**VRPSGIPER 60 FSGSNSGNTA TLTITRVEAG DEADYFC**QVW DNTSEHV**VFG GGTQLTVLG 109
5	XPA.42.089 heavy chain DNA Sequence	caggtgcagc tggtacagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60 tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120 cctggacaag ggcttgagtg gatgggaggg atcatcccta tctttggtac agcaaactac 180 gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac 240 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gaggggacta 300 tgggaggttc gggcccttcc gtcggtctac tggggccagg gaaccctggt caccgtctcc 360 tca 363
6	XPA.42.089 heavy chain Amino Acid Sequence	QVQLVQSGAE VKKPGSSVKV SCKAS**GGTFS SYA**ISWVRQA PGQGLEWMGG **IIPIFGTA**NY 60 AQKFQGRVTI TADESTSTAY MELSSLRSED TAVYYC**ARGL WEVRALPSVY** WGQGTLVTVS 120 S 121
7	XPA.42.089 light chain DNA Sequence	tcctatgagc tgacacagcc accctcagtg tccgtggccc cgggacagac ggccagaatt 60 acctgtgggg caaatgacat tggaagtaaa agtgtccact ggtaccagca gaaggcaggc 120 caggcccctg tactggtcgt ctctgaagat atcatccggc cctcagggat ccctgagcga 180 atctctggct ccaactctgg gaacacggcc accctgacca tcagcagggt cgaagccggg 240 gatgaggccg actattactg tcaagtttgg gatagggata gtgatcaata tgtctttgga 300 actgggacca aggtcaccgt cctaggc 327
8	XPA.42.089 light chain Amino Acid Sequence	SYELTQPPSV SVAPGQTARI TCGAN**DIGSK S**VHWYQQKAG QAPVLVVS**ED I**IRPSGIPER 60 ISGSNSGNTA TLTISRVEAG DEADYYC**QVW DRDSDQY**VFG TGTKVTVLG 109

Table 1

9	XPA.42.681 heavy chain DNA Sequence	caggttcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60 tcctgcaagg cttctggata caccttcacc ggctactata tgcactgggt gcgacaggcc 120 cctggacaag ggcttgagtg gatgggatgg atcaacccta acactggtgg cacaaactat 180 gcacagaagt ttcagggcag ggtcaccatg accagggaca cgtccatcag cacagcctac 240 atggagctga gcaggctgag atctgacgac acggccgttt attactgtgc gagatcattc 300 ctgtggctgg ttccctctga tgcttttgat atctggggcc aagggacaat ggtcaccgtc 360 tcttca 366
10	XPA.42.681 heavy chain Amino Acid Sequence	QVQLVQSGAE VKKPGASVKV SCKAS**GYTFT GYY**MHWVRQA PGQGLEWMGW **INPNTGGT**NY 60 AQKFQGRVTM TRDTSISTAY MELSRLRSDD TAVYYC**ARSF LWLVPSDAFD I**WGQGTMVTV 120 SS 122
11	XPA.42.681 light chain DNA Sequence	tcctatgtgc tgactcagcc accctcagtg tccgtggccc caggaaagac ggccaggatt 60 acctgtgggg gaaacaacat tggatttaga agtgtgcact ggtaccaaca gaagtcaggc 120 caggcccctg tcctggtcat ctattttgat cgcgcccggc cctcagggat ccctgagcga 180 ttctctgcct ccaactctga gaacacggcc accctgacca tcaggagggt cgaagccggg 240 gatgaggccg actattactg tcaggtgtgg gatagtgaca gtgatgatct agtcttcggc 300 ggaggcaccc agctgaccgt cctaggt 327
12	XPA.42.681 light chain Amino Acid Sequence	SYVLTQPPSV SVAPGKTARI TCGGN**NIGFR S**VHWYQQKSG QAPVLVIY**FD R**ARPSGIPER 60 FSASNSENTA TLTIRRVEAG DEADYYC**QVW DSDSDDLV**FG GGTQLTVLG 109
13	XPA.42.068 – H-CDR1	GYTFTGYY
14	XPA.42.068 – H-CDR2	INPNTGGT
15	XPA.42.068 – H-CDR3	ARSFLWLVPS DAFDI
16	XPA.42.068 – L-CDR1	NIGRKS
17	XPA.42.068 – L-CDR2	YDR
18	XPA.42.068 – L-CDR3	QVWDNTSEHV
19	XPA.42-089 – H-CDR1	GGTFSSYA
20	XPA.42-089 – H-CDR2	IIPIFGTA
21	XPA.42-089 – H-CDR3	ARGLWEVRAL PSVY
22	XPA.42-089 – L-CDR1	DIGSKS
23	XPA.42-089 – L-CDR2	EDI
24	XPA.42-089 – L-CDR3	QVWDRDSDQY
25	XPA.42-681 – H-CDR1	GYTFTGYY
26	XPA.42-681 – H-CDR2	INPNTGGT
27	XPA.42-681 – H-CDR3	ARSFLWLVPS DAFDI
28	XPA.42-681 – L-CDR1	NIGFRS
29	XPA.42-681 – L-CDR2	FDR
30	XPA.42-681 – L-CDR3	QVWDSDSDDL V