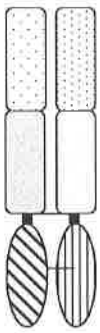
Figure 1



First Variable region of light chain VL1

First Variable region of heavy chain VH1

Constant regions cKappa and CH1

Second variable region of light chain VL2

Second variable region of heavy chain VH2

Disulphide bond

Figure 2

(a) Light chain variable region of antibody A26 (SEQ ID NO:7)

DIQMTQSPSSLSASVGDRVTITCRATQSIYNALAWYQQKPGKAPKLLIYNANTLHTGVPSRF
SASGSGTDSTLTISSLQPEDFATYYCQQYYDYPLTFGGGTKVEIKR

(b) Heavy chain variable region of antibody A26 (SEQ ID NO:8)

EVQLVESGGGLVQPGGSLRLSCAASGFTFTNYGIHWIRQAPGKGLEWVASISPSGGLTYYRD
SVKGRFTISRDDAKNSPYLQMNSLRAEDTAVYYCATGGEGIFDYWGQGTLVTVSS

(c)

CDRH1: NYGIH (SEQ ID NO:1)

CDRH2: SISPSGGLTYYRDSVKG (SEQ ID NO:2)

CDRH3: GGEGIFDY (SEQ ID NO:3)

CDRL1: RATQSIYNALA (SEQ ID NO:4)

CDRL2: NANTLHT (SEQ ID NO:5)

CDRL3: QQYYDYPLT (SEQ ID NO:6)

(d) Light chain of anti-OX40 antibody Fab component (SEQ ID NO:9)

DIQMTQSPSSLSASVGDRVTITCRATQSIYNALAWYQQKPGKAPKLLIYNANTLHTGVPSRF
SASGSGTDSTLTISSLQPEDFATYYCQQYYDYPLTFGGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADY
EKHKVYACEVTHQGLSSPVTKSFNRGEC

(e) Heavy chain of anti-OX40 antibody Fab component (SEQ ID NO:10)

EVQLVESGGGLVQPGGSLRLSCAASGFTFTNYGIHWIRQAPGKGLEWVASISPSGGLTYYRD
SVKGRFTISRDDAKNSPYLQMNSLRAEDTAVYYCATGGEGIFDYWGQGTLVTVSSASTKGPS
VFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVV
TVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSC

Figure 3

(a) Heavy chain of anti-albumin Fv component (SEQ ID NO:11)

EVQLLESGGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKCLEWIGIIWASGTTFYATWAKGRFTISRDNSK
NTVYLQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGTLVTVSS

(b) Light chain of anti-albumin Fv component (SEQ ID NO:12)

DIQMTQSPSSVSASVGDRVTITCQSSPSVWSNFLSWYQQKPGKAPKLLIYEASKLTSGVPSRFSGSGSGTDFTLT
ISSLQPEDFATYYCGGGYSSISDTTFGCGTKVEIKRT

(c) Linker 1 (SEQ ID NO:13)

SGGGGSGGGGTGGGGS

(d) Linker 2 (SEQ ID NO:14)

GGGGSGGGGSGGGGS

(e) A26 Fab Heavy-(G4S,G4T,G4S)-645dsFv(gH5) (SEQ ID NO:15)

EVQLVESGGGLVQPGGSLRLSCAASGFTFTNYGIHWIRQAPGKGLEWVASISPSGGLTYYRDSVKGRFTISRDDA
KNSPYLQMNSLRAEDTAVYYCATGGEGIFDYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYF
PEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCSGGGG
SGGGGTGGGGSEVQLLESGGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKCLEWIGIIWASGTTFYATWAK
GRFTISRDNSKNTVYLQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGTLVTVSS

(f) A26 Fab Light-(3xG4S)-645dsFv(gL4) (SEQ ID NO:16)

DIQMTQSPSSLSASVGDRVTITCRATQSIYNALAWYQQKPGKAPKLLIYNANTLHTGVPSRFSASGSGTDSTLTI
SSLQPEDFATYYCQQYYDYPLTFGGGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKV
DNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGECGGGGSGGGGSG
GGGSDIQMTQSPSSVSASVGDRVTITCQSSPSVWSNFLSWYQQKPGKAPKLLIYEASKLTSGVPSRFSGSGSGTD
FTLTISSLQPEDFATYYCGGGYSSISDTTFGCGTKVEIKRT

Figure 4

(a) 645gH1 heavy chain variable domain (SEQ ID NO:17)

EVQLLESGGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKCLEWIGIIWASGTTFYATWAKGRFTISRDSTT
VYLQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGTLVTVSS

(b) 645gL1 light chain variable domain (SEQ ID NO:18)

DIVMTQSPSSVSASVGDRVTITCQSSPSVWSNFLSWYQQKPGKAPKLLIYEASKLTSGVPSRFKGSGSGTDFTLT
ISSLQPEDFATYYCGGGYSSISDTTFGCGTKVEIK

(c) A26 Fab Heavy-(3xG4S)-645dsFv(gH1) (SEQ ID NO:19)

EVQLVESGGGLVQPGGSLRLSCAASGFTFTNYGIHWIRQAPGKGLEWVASISPSGGLTYYRDSVKGRFTISRDDA
KNSPYLQMNSLRAEDTAVYYCATGGEGIFDYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYF
PEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCSGGGG
SGGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKCLEWIGIIWASGTTFYATWAK
GRFTISRDSTTVYLQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGTLVTVSS

(d) A26 Fab Light-(3xG4S)-645dsFv(gL1) (SEQ ID NO:20)

DIQMTQSPSSLSASVGDRVTITCRATQSIYNALAWYQQKPGKAPKLLIYNANTLHTGVPSRFSASGSGTDSTLTI
SSLQPEDFATYYCQQYYDYPLTFGGGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKV
DNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGECSGGGGSGGGGS
GGGGSDIVMTQSPSSVSASVGDRVTITCQSSPSVWSNFLSWYQQKPGKAPKLLIYEASKLTSGVPSRFKGSGSGT
DFTLTISSLQPEDFATYYCGGGYSSISDTTFGCGTKVEIK

Figure 5

a) DNA encoding Heavy chain A26-645(gH5) including E.coli OmpA leader (SEQ ID NO:21)

ATGAAGAAGACTGCTATAGCGATCGCAGTGGCGCTAGCTGGTTTCGCCACCGTGGCGCAAGCTGAAGTTCAGCTG
GTCGAGTCTGGAGGCGGGCTTGTCCAGCCTGGAGGGAGCCTGCGTCTCTCTTGTGCAGCAAGCGGTTTCACGTTC
ACCAACTACGGTATCCACTGGATTCGTCAGGCACCAGGTAAAGGTCTGGAATGGGTAGCCTCTATCTCTCCGTCT
GGTGGTCTGACGTACTACCGTGACTCTGTCAAAGGTCGTTTCACCATCTCTCGTGATGACGCGAAAAACTCTCCG
TACCTGCAAATGAACTCTCTGCGTGCAGAAGATACCGCAGTGTACTACTGCGCTACTGGTGGTGAAGGTATCTTC
GACTACTGGGGTCAGGGTACCCTGGTAACTGTCTCGAGCGCTTCTACAAAGGGCCCAAGCGTTTTCCCACTGGCT
CCGTCCTCTAAATCCACCTCTGGTGGTACGGCTGCACTGGGTTGCCTGGTGAAAGACTACTTCCCAGAACCAGTT
ACCGTGTCTTGGAACTCTGGTGCACTGACCTCTGGTGTTCACACCTTTCCAGCAGTTCTCCAGTCTTCTGGTCTG
TACTCCCTGTCTAGCGTGGTTACCGTTCCGTCTTCTTCTCTGGGTACTCAGACCTACATCTGCAACGTCAACCAC
AAACCGTCCAACACCAAGGTCGACAAAAAAGTCGAGCCGAAATCCTGTAGTGGAGGTGGGGGCTCAGGTGGAGGC
GGGACCGGTGGAGGTGGCAGCGAGGTTCAACTGCTTGAGTCTGGAGGAGGCCTAGTCCAGCCTGGAGGGAGCCTG
CGTCTCTCTTGTGCAGTAAGCGGCATCGACCTGAGCAATTACGCCATCAACTGGGTGAGACAAGCTCCGGGGAAG
TGTTTAGAATGGATCGGTATAATATGGGCCAGTGGGACGACCTTTTATGCTACATGGGCGAAAGGAAGGTTTACA
ATTAGCCGGGACAATAGCAAAAACACCGTGTATCTCCAAATGAACTCCTTGCGAGCAGAGGACACGGCGGTGTAC
TATTGTGCTCGCACTGTCCCAGGTTATAGCACTGCACCCTACTTCGATCTGTGGGGACAAGGGACCCTGGTGACT
GTTTCAAGTTAA

b) DNA encoding Heavy chain A26-645(gH5) (SEQ ID NO:22)

GAAGTTCAGCTGGTCGAGTCTGGAGGCGGGCTTGTCCAGCCTGGAGGGAGCCTGCGTCTCTCTTGTGCAGCAAGC
GGTTTCACGTTCACCAACTACGGTATCCACTGGATTCGTCAGGCACCAGGTAAAGGTCTGGAATGGGTAGCCTCT
ATCTCTCCGTCTGGTGGTCTGACGTACTACCGTGACTCTGTCAAAGGTCGTTTCACCATCTCTCGTGATGACGCG
AAAAACTCTCCGTACCTGCAAATGAACTCTCTGCGTGCAGAAGATACCGCAGTGTACTACTGCGCTACTGGTGGT
GAAGGTATCTTCGACTACTGGGGTCAGGGTACCCTGGTAACTGTCTCGAGCGCTTCTACAAAGGGCCCAAGCGTT
TTCCCACTGGCTCCGTCCTCTAAATCCACCTCTGGTGGTACGGCTGCACTGGGTTGCCTGGTGAAAGACTACTTC
CCAGAACCAGTTACCGTGTCTTGGAACTCTGGTGCACTGACCTCTGGTGTTCACACCTTTCCAGCAGTTCTCCAG
TCTTCTGGTCTGTACTCCCTGTCTAGCGTGGTTACCGTTCCGTCTTCTTCTCTGGGTACTCAGACCTACATCTGC
AACGTCAACCACAAACCGTCCAACACCAAGGTCGACAAAAAAGTCGAGCCGAAATCCTGTAGTGGAGGTGGGGGC
TCAGGTGGAGGCGGGACCGGTGGAGGTGGCAGCGAGGTTCAACTGCTTGAGTCTGGAGGAGGCCTAGTCCAGCCT
GGAGGGAGCCTGCGTCTCTCTTGTGCAGTAAGCGGCATCGACCTGAGCAATTACGCCATCAACTGGGTGAGACAA
GCTCCGGGGAAGTGTTTAGAATGGATCGGTATAATATGGGCCAGTGGGACGACCTTTTATGCTACATGGGCGAAA
GGAAGGTTTACAATTAGCCGGGACAATAGCAAAAACACCGTGTATCTCCAAATGAACTCCTTGCGAGCAGAGGAC
ACGGCGGTGTACTATTGTGCTCGCACTGTCCCAGGTTATAGCACTGCACCCTACTTCGATCTGTGGGGACAAGGG
ACCCTGGTGACTGTTTCAAGTTAA

Figure 6

a) DNA encoding Light chain A26-645(gL4) including E.coli OmpA leader (SEQ ID NO:23)

ATGAAAAAGACAGCTATCGCAATTGCAGTGGCGTTGGCTGGTTTCGCGACCGTTGCGCAAGCTGATATCCAGATG
ACCCAGAGCCCAAGCAGTCTCTCCGCCAGCGTAGGCGATCGTGTGACTATTACCTGTCGTGCAACCCAGAGCATC
TACAACGCTCTGGCTTGGTATCAGCAGAAACCGGGTAAAGCGCCAAAACTCCTGATCTACAACGCGAACACTCTG
CATACTGGTGTTCCGTCTCGTTTCTCTGCGTCTGGTTCTGGTACGGACTCTACTCTGACCATCTCCTCTCTCCAG
CCGGAAGATTTCGCGACCTACTACTGCCAGCAGTACTACGATTACCCACTGACGTTTGGTGGTGGTACCAAAGTT
GAGATCAAACGTACGGTTGCAGCTCCATCCGTCTTCATCTTTCCACCGTCTGACGAACAGCTCAAATCTGGTACT
GCTTCTGTCGTTTGCCTCCTGAACAACTTCTATCCGCGTGAAGCGAAAGTCCAGTGGAAAGTCGACAACGCACTC
CAGTCTGGTAACTCTCAGGAATCTGTGACCGAACAGGACTCCAAAGACTCCACCTACTCTCTGTCTAGCACCCTG
ACTCTGTCCAAAGCAGACTACGAGAAACACAAAGTGTACGCTTGCGAAGTTACCCATCAGGGTCTGAGCTCTCCG
GTTACCAAATCCTTTAATAGAGGGGAGTGTGGTGGCGGTGGCAGTGGTGGTGGAGGTTCCGGAGGTGGCGGTTCA
GACATACAAATGACCCAGAGTCCTTCATCGGTATCCGCGTCCGTTGGCGATAGGGTGACTATTACATGTCAAAGC
TCTCCTAGCGTCTGGAGCAATTTTCTATCCTGGTATCAACAGAAACCGGGGAAGGCTCCAAAACTTCTGATTTAT
GAAGCCTCGAAACTCACCAGTGGAGTTCCGTCAAGATTCAGTGGCTCTGGATCAGGGACAGACTTCACGTTGACA
ATCAGTTCGCTGCAACCAGAGGACTTTGCGACCTACTATTGTGGTGGAGGTTACAGTAGCATAAGTGATACGACA
TTTGGGTGCGGTACTAAGGTGGAAATCAAACGTACCTAA

b) DNA encoding Light chain A26-645(gL4) (SEQ ID NO:24)

GATATCCAGATGACCCAGAGCCCAAGCAGTCTCTCCGCCAGCGTAGGCGATCGTGTGACTATTACCTGTCGTGCA
ACCCAGAGCATCTACAACGCTCTGGCTTGGTATCAGCAGAAACCGGGTAAAGCGCCAAAACTCCTGATCTACAAC
GCGAACACTCTGCATACTGGTGTTCCGTCTCGTTTCTCTGCGTCTGGTTCTGGTACGGACTCTACTCTGACCATC
TCCTCTCTCCAGCCGGAAGATTTCGCGACCTACTACTGCCAGCAGTACTACGATTACCCACTGACGTTTGGTGGT
GGTACCAAAGTTGAGATCAAACGTACGGTTGCAGCTCCATCCGTCTTCATCTTTCCACCGTCTGACGAACAGCTC
AAATCTGGTACTGCTTCTGTCGTTTGCCTCCTGAACAACTTCTATCCGCGTGAAGCGAAAGTCCAGTGGAAAGTC
GACAACGCACTCCAGTCTGGTAACTCTCAGGAATCTGTGACCGAACAGGACTCCAAAGACTCCACCTACTCTCTG
TCTAGCACCCTGACTCTGTCCAAAGCAGACTACGAGAAACACAAAGTGTACGCTTGCGAAGTTACCCATCAGGGT
CTGAGCTCTCCGGTTACCAAATCCTTTAATAGAGGGGAGTGTGGTGGCGGTGGCAGTGGTGGTGGAGGTTCCGGA
GGTGGCGGTTCAGACATACAAATGACCCAGAGTCCTTCATCGGTATCCGCGTCCGTTGGCGATAGGGTGACTATT
ACATGTCAAAGCTCTCCTAGCGTCTGGAGCAATTTTCTATCCTGGTATCAACAGAAACCGGGGAAGGCTCCAAAA
CTTCTGATTTATGAAGCCTCGAAACTCACCAGTGGAGTTCCGTCAAGATTCAGTGGCTCTGGATCAGGGACAGAC
TTCACGTTGACAATCAGTTCGCTGCAACCAGAGGACTTTGCGACCTACTATTGTGGTGGAGGTTACAGTAGCATA
AGTGATACGACATTTGGGTGCGGTACTAAGGTGGAAATCAAACGTACCTAA

Figure 7

a) DNA encoding Heavy chain A26-645(gH5) including B72.3 leader sequence (SEQ ID NO:25)

ATGGAATGGTCCTGGGTCTTCCTGTTTTTCCTTTCTGTCACAACCGGGGTGCACAGCGAGGTGCAGCTCGTCGAG
TCTGGAGGCGGGCTTGTCCAGCCTGGAGGGAGCCTGCGTCTCTCTTGTGCAGCAAGCGGTTTCACGTTCACCAAC
TACGGTATCCACTGGATTCGTCAGGCACCAGGTAAAGGTCTGGAATGGGTAGCCTCTATCTCTCCGTCTGGTGGT
CTGACGTACTACCGTGACTCTGTCAAAGGTCGTTTCACCATCTCTCGTGATGACGCGAAAAACTCTCCGTACCTG
CAGATGAACTCTCTGCGTGCAGAAGATACCGCAGTGTACTACTGCGCTACTGGTGGTGAAGGTATCTTCGACTAC
TGGGGTCAGGGTACCCTGGTAACTGTCTCAAGCGCTTCTACAAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCC
TCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGTGACGGTG
TCGTGGAACTCAGGCGCCCTGACCAGCGGCGTGCACACCTTCCCGGCTGTCCTACAGTCCTCTGGACTCTACTCC
CTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAATCACAAGCCC
AGCAACACCAAGGTGGACAAGAAAGTTGAGCCCAAATCTTGTTCCGGAGGTGGCGGTTCCGGAGGTGGCGGTACC
GGTGGCGGTGGATCCGAAGTCCAGCTGCTTGAATCCGGAGGCGGACTCGTGCAGCCCGGAGGCAGTCTTCGCTTG
TCCTGCGCTGTATCTGGAATCGACCTGAGCAATTACGCCATCAACTGGGTGAGACAGGCACCTGGGAAATGCCTC
GAATGGATCGGCATTATATGGGCTAGTGGGACGACCTTTTATGCTACATGGGCGAAGGGTAGATTCACAATCTCA
CGGGATAATAGTAAGAACACAGTGTACCTGCAGATGAACTCCCTGCGAGCAGAGGATACCGCCGTTTACTATTGT
GCTCGCACTGTCCCAGGTTATAGCACTGCACCCTACTTTGATCTGTGGGGGCAGGGCACTCTGGTCACCGTCTCG
AGTTGA

b) DNA encoding Heavy chain A26-645(gH5) (SEQ ID NO:26)

GAGGTGCAGCTCGTCGAGTCTGGAGGCGGGCTTGTCCAGCCTGGAGGGAGCCTGCGTCTCTCTTGTGCAGCAAGC
GGTTTCACGTTCACCAACTACGGTATCCACTGGATTCGTCAGGCACCAGGTAAAGGTCTGGAATGGGTAGCCTCT
ATCTCTCCGTCTGGTGGTCTGACGTACTACCGTGACTCTGTCAAAGGTCGTTTCACCATCTCTCGTGATGACGCG
AAAAACTCTCCGTACCTGCAGATGAACTCTCTGCGTGCAGAAGATACCGCAGTGTACTACTGCGCTACTGGTGGT
GAAGGTATCTTCGACTACTGGGGTCAGGGTACCCTGGTAACTGTCTCAAGCGCTTCTACAAAGGGCCCATCGGTC
TTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTC
CCCGAACCGGTGACGGTGTCGTGGAACTCAGGCGCCCTGACCAGCGGCGTGCACACCTTCCCGGCTGTCCTACAG
TCCTCTGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACCCAGACCTACATCTGC
AACGTGAATCACAAGCCCAGCAACACCAAGGTGGACAAGAAAGTTGAGCCCAAATCTTGTTCCGGAGGTGGCGGT
TCCGGAGGTGGCGGTACCGGTGGCGGTGGATCCGAAGTCCAGCTGCTTGAATCCGGAGGCGGACTCGTGCAGCCC
GGAGGCAGTCTTCGCTTGTCCTGCGCTGTATCTGGAATCGACCTGAGCAATTACGCCATCAACTGGGTGAGACAG
GCACCTGGGAAATGCCTCGAATGGATCGGCATTATATGGGCTAGTGGGACGACCTTTTATGCTACATGGGCGAAG
GGTAGATTCACAATCTCACGGGATAATAGTAAGAACACAGTGTACCTGCAGATGAACTCCCTGCGAGCAGAGGAT
ACCGCCGTTTACTATTGTGCTCGCACTGTCCCAGGTTATAGCACTGCACCCTACTTTGATCTGTGGGGGCAGGGC
ACTCTGGTCACCGTCTCGAGTTGA

Figure 8

a) DNA encoding Light chain A26-645(gL4) including B72.3 leader sequence (SEQ ID NO:27)

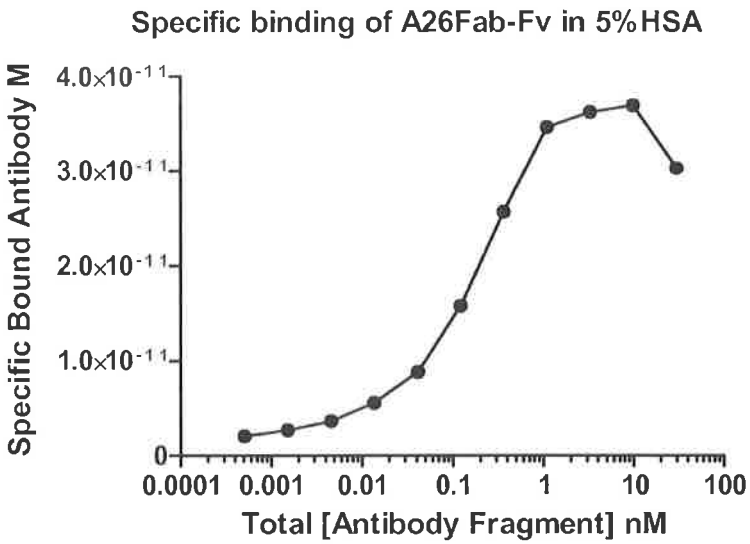
ATGTCAGTTCCCACACAGGTGCTGGGCCTGCTTCTGTTGTGGCTCACCGATGCTAGGTGTGATATCCAGATGACC
CAGAGTCCAAGCAGTCTCTCCGCCAGCGTAGGCGATCGTGTGACTATTACCTGTCGTGCAACCCAGAGCATCTAC
AACGCTCTGGCTTGGTATCAGCAGAAACCGGGTAAAGCGCCAAAACTCCTGATCTACAACGCGAACACTCTGCAT
ACCGGTGTTCCGTCTCGTTTCTCTGCGTCTGGTTCTGGTACGGACTCTACTCTGACCATCTCCTCTCTGCAGCCG
GAAGATTTCGCGACCTACTACTGCCAGCAGTACTACGATTACCCACTGACGTTTGGTGGTGGTACCAAAGTTGAG
ATCAAACGTACGGTGGCTGCACCATCTGTCTTCATCTTCCCCCCATCTGATGAGCAGTTGAAGTCTGGCACTGCC
TCTGTTGTGTGCCTGCTGAATAACTTCTACCCTAGAGAGGCCAAAGTCCAGTGGAAGGTGGATAACGCCCTTCAA
TCCGGAAACTCCCAGGAGAGTGTCACTGAGCAGGACTCAAAGGACTCCACCTATAGCCTTAGCAGCACACTGACA
CTGAGCAAGGCTGACTACGAGAAACACAAGGTCTACGCCTGCGAAGTGACACATCAAGGCCTGAGCTCACCCGTG
ACAAAGAGCTTTAACAGGGGAGAGTGTGGTGGAGGTGGCTCTGGCGGTGGTGGCTCCGGAGGCGGAGGAAGCGAC
ATCCAGATGACCCAGAGCCCTTCCTCTGTAAGCGCCAGTGTCGGAGACAGAGTGACTATTACCTGCCAAAGCTCC
CCTTCAGTCTGGTCCAATTTTCTATCCTGGTACCAGCAAAAGCCCGGAAAGGCTCCTAAATTGCTGATCTACGAA
GCAAGCAAACTCACCAGCGGCGTGCCCAGCAGGTTCAGCGGCAGTGGGTCTGGAACTGACTTTACCCTGACAATC
TCCTCACTCCAGCCCGAGGACTTCGCCACCTATTACTGCGGTGGAGGTTACAGTAGCATAAGTGATACGACATTT
GGATGCGGCACTAAAGTGGAAATCAAGCGTACCTGA

b) DNA encoding Light chain A26-645(gL4) (SEQ ID NO:28)

GATATCCAGATGACCCAGAGTCCAAGCAGTCTCTCCGCCAGCGTAGGCGATCGTGTGACTATTACCTGTCGTGCA
ACCCAGAGCATCTACAACGCTCTGGCTTGGTATCAGCAGAAACCGGGTAAAGCGCCAAAACTCCTGATCTACAAC
GCGAACACTCTGCATACCGGTGTTCCGTCTCGTTTCTCTGCGTCTGGTTCTGGTACGGACTCTACTCTGACCATC
TCCTCTCTGCAGCCGGAAGATTTCGCGACCTACTACTGCCAGCAGTACTACGATTACCCACTGACGTTTGGTGGT
GGTACCAAAGTTGAGATCAAACGTACGGTGGCTGCACCATCTGTCTTCATCTTCCCCCCATCTGATGAGCAGTTG
AAGTCTGGCACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCTACCCTAGAGAGGCCAAAGTCCAGTGGAAGGTG
GATAACGCCCTTCAATCCGGAAACTCCCAGGAGAGTGTCACTGAGCAGGACTCAAAGGACTCCACCTATAGCCTT
AGCAGCACACTGACACTGAGCAAGGCTGACTACGAGAAACACAAGGTCTACGCCTGCGAAGTGACACATCAAGGC
CTGAGCTCACCCGTGACAAAGAGCTTTAACAGGGGAGAGTGTGGTGGAGGTGGCTCTGGCGGTGGTGGCTCCGGA
GGCGGAGGAAGCGACATCCAGATGACCCAGAGCCCTTCCTCTGTAAGCGCCAGTGTCGGAGACAGAGTGACTATT
ACCTGCCAAAGCTCCCCTTCAGTCTGGTCCAATTTTCTATCCTGGTACCAGCAAAAGCCCGGAAAGGCTCCTAAA
TTGCTGATCTACGAAGCAAGCAAACTCACCAGCGGCGTGCCCAGCAGGTTCAGCGGCAGTGGGTCTGGAACTGAC
TTTACCCTGACAATCTCCTCACTCCAGCCCGAGGACTTCGCCACCTATTACTGCGGTGGAGGTTACAGTAGCATA
AGTGATACGACATTTGGATGCGGCACTAAAGTGGAAATCAAGCGTACCTGA

Figure 9

A


Specific binding of A26Fab-Fv in 5%HSA
Specific Bound Antibody M
4.0x10-11
3.0x10-11
2.0x10-11
1.0x10-11
0
0.0001 0.001 0.01 0.1 1 10 100
Total [Antibody Fragment] nM

B

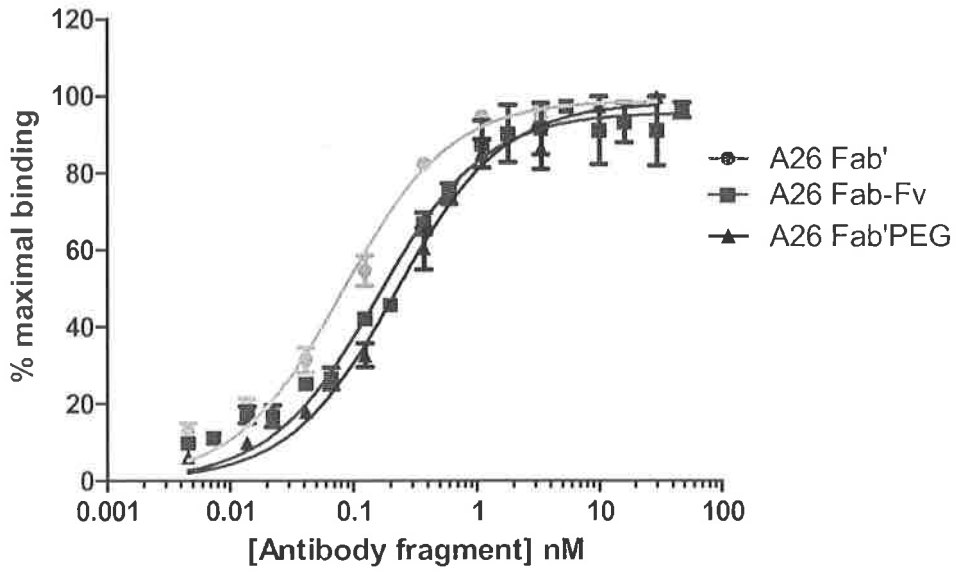
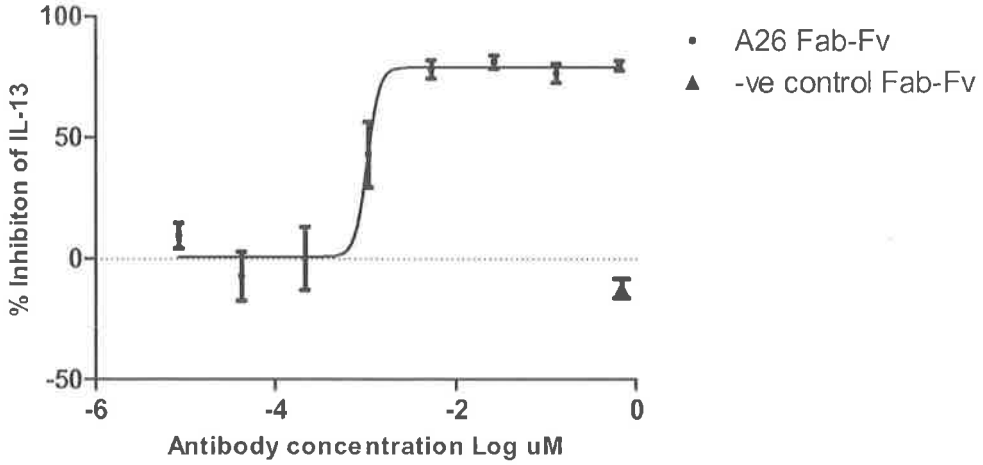

% maximal binding
120
100
80
60
40
20
0
0.001 0.01 0.1 1 10 100
[Antibody fragment] nM
A26 Fab'
A26 Fab-Fv
A26 Fab'PEG

Figure 10

(a)


100
50
0
-50
% Inhibiton of IL-13
-6
-4
-2
0
Antibody concentration Log uM
A26 Fab-Fv
-ve control Fab-Fv

(b)

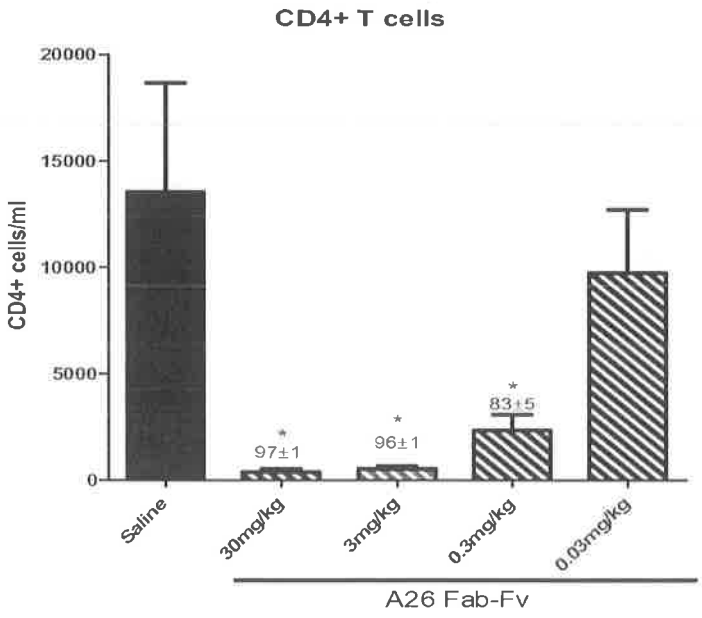
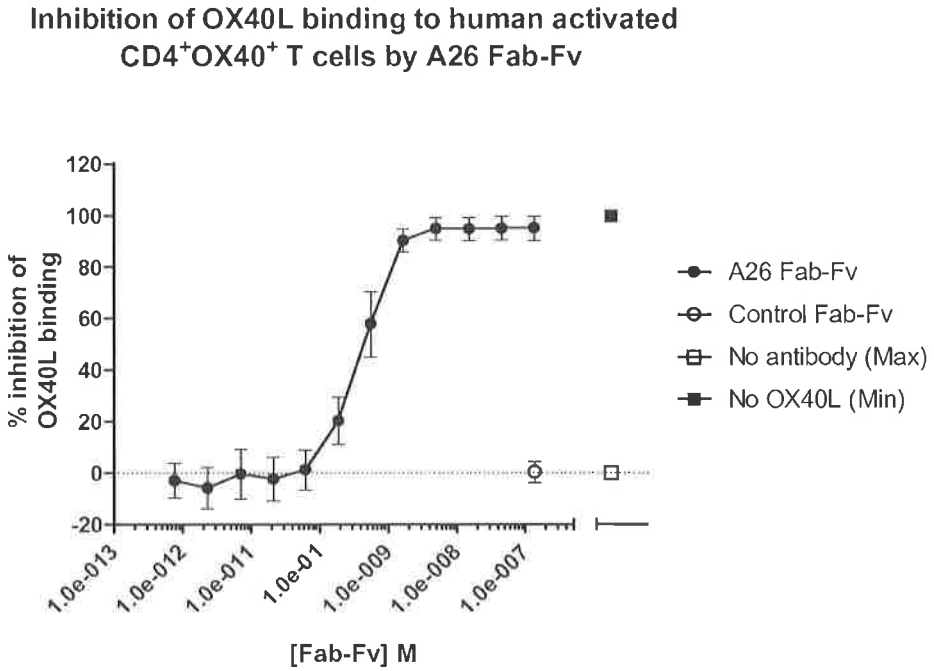

CD4+ T cells
20000
15000
10000
5000
0
CD4+ cells/ml
97±1
96±1
83±5
Saline
30mg/kg
3mg/kg
0.3mg/kg
0.03mg/kg
A26 Fab-Fv

Figure 11

A


Inhibition of OX40L binding to human activated CD4+OX40+ T cells by A26 Fab-Fv
% inhibition of OX40L binding
120
100
80
60
40
20
0
-20
1.0e-013
1.0e-012
1.0e-011
1.0e-01
1.0e-009
1.0e-008
1.0e-007
[Fab-Fv] M
A26 Fab-Fv
Control Fab-Fv
No antibody (Max)
No OX40L (Min)

B

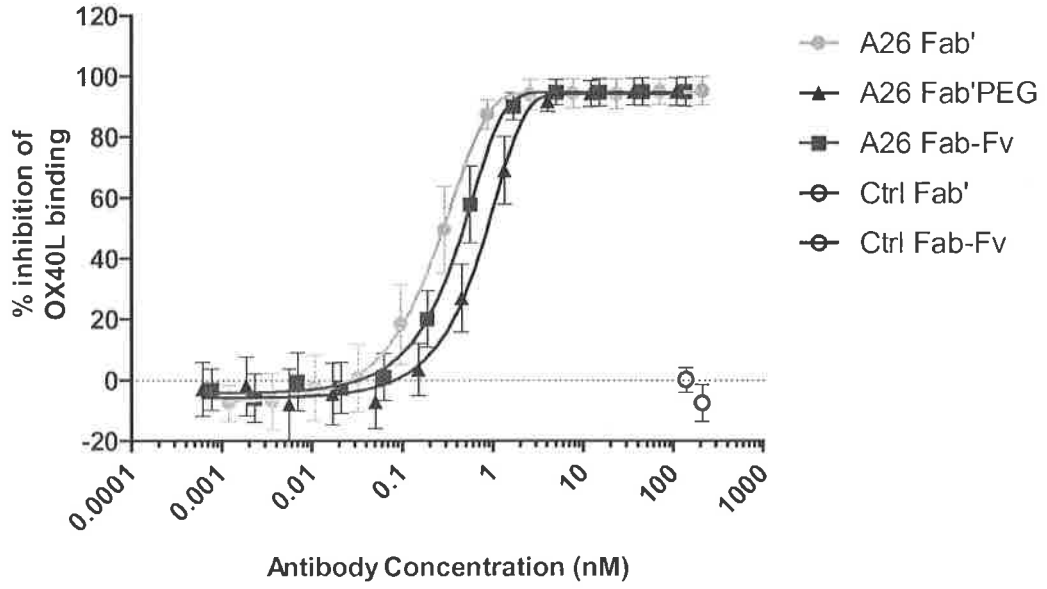
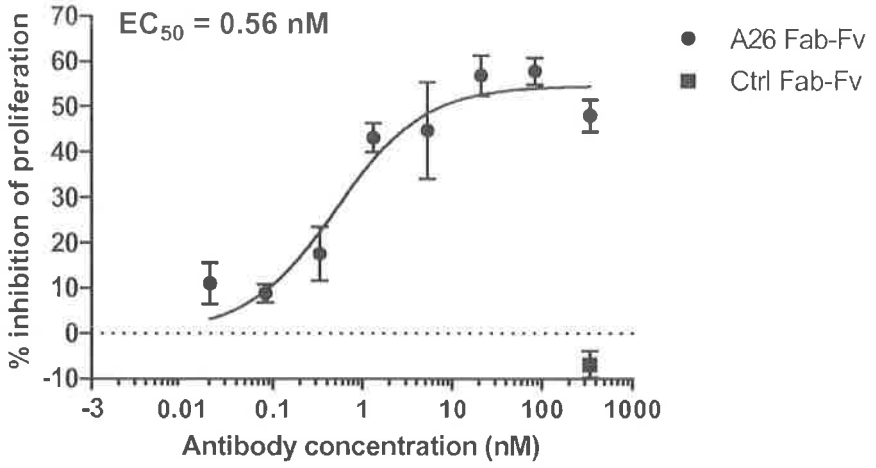

% inhibition of OX40L binding
120
100
80
60
40
20
0
-20
0.0001
0.001
0.01
0.1
1
10
100
1000
Antibody Concentration (nM)
A26 Fab'
A26 Fab'PEG
A26 Fab-Fv
Ctrl Fab'
Ctrl Fab-Fv

Figure 12

A A26 Fab-Fv inhibits a human missed lymphocyte reaction



B A26 Fab-Fv inhibits IFN-γ production during a human MLR

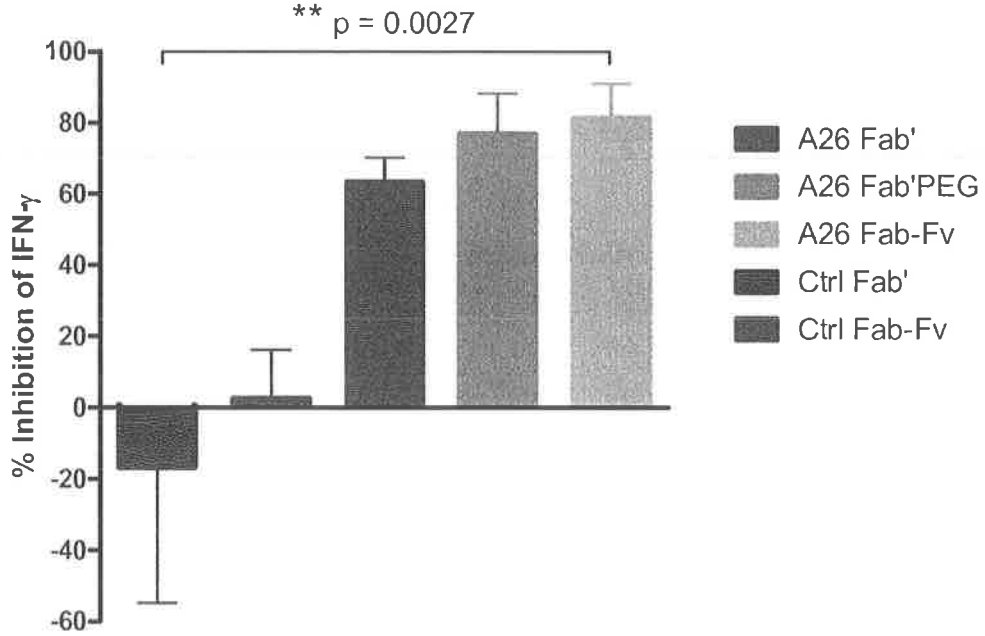


Figure 13

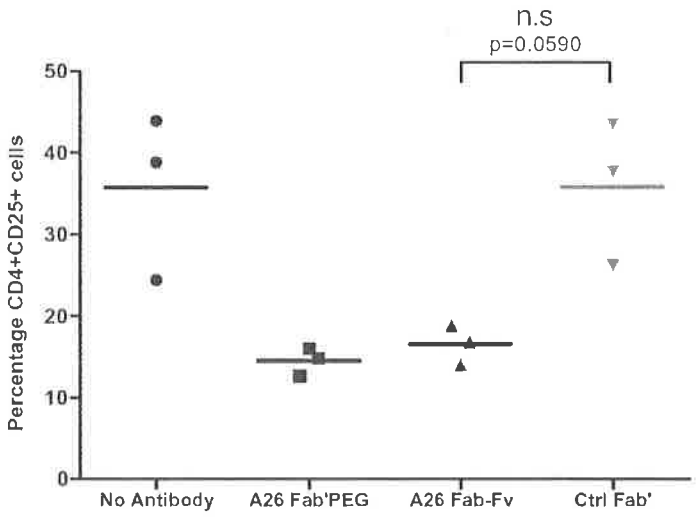

n.s
p=0.0590
Percentage CD4+CD25+ cells
50
40
30
20
10
0
No Antibody
A26 Fab'PEG
A26 Fab-Fv
Ctrl Fab'

Figure 14A

A26 Fab-Fv administered prior to cell transfer dose dependently inhibits $CD4^+$ T cell proliferation in the Hu-NSG model

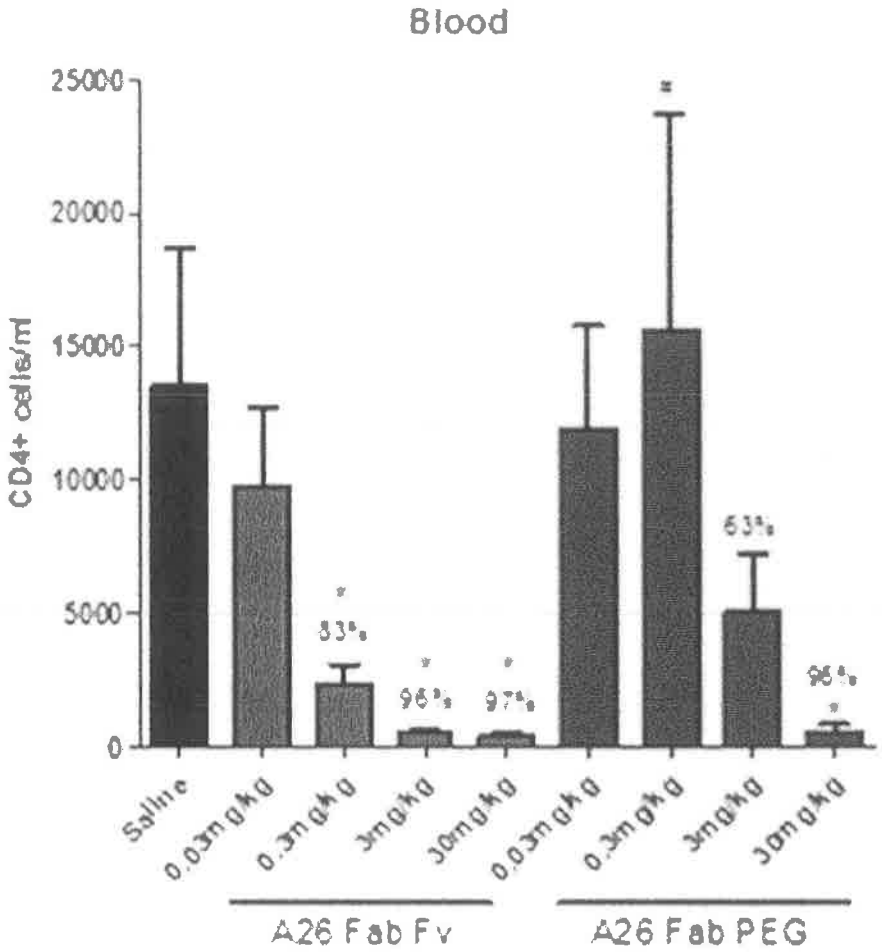


Figure 14B

A26 Fab-Fv administered prior to cell transfer dose dependently inhibits $CD8^+$ T cell proliferation in the Hu-NSG model

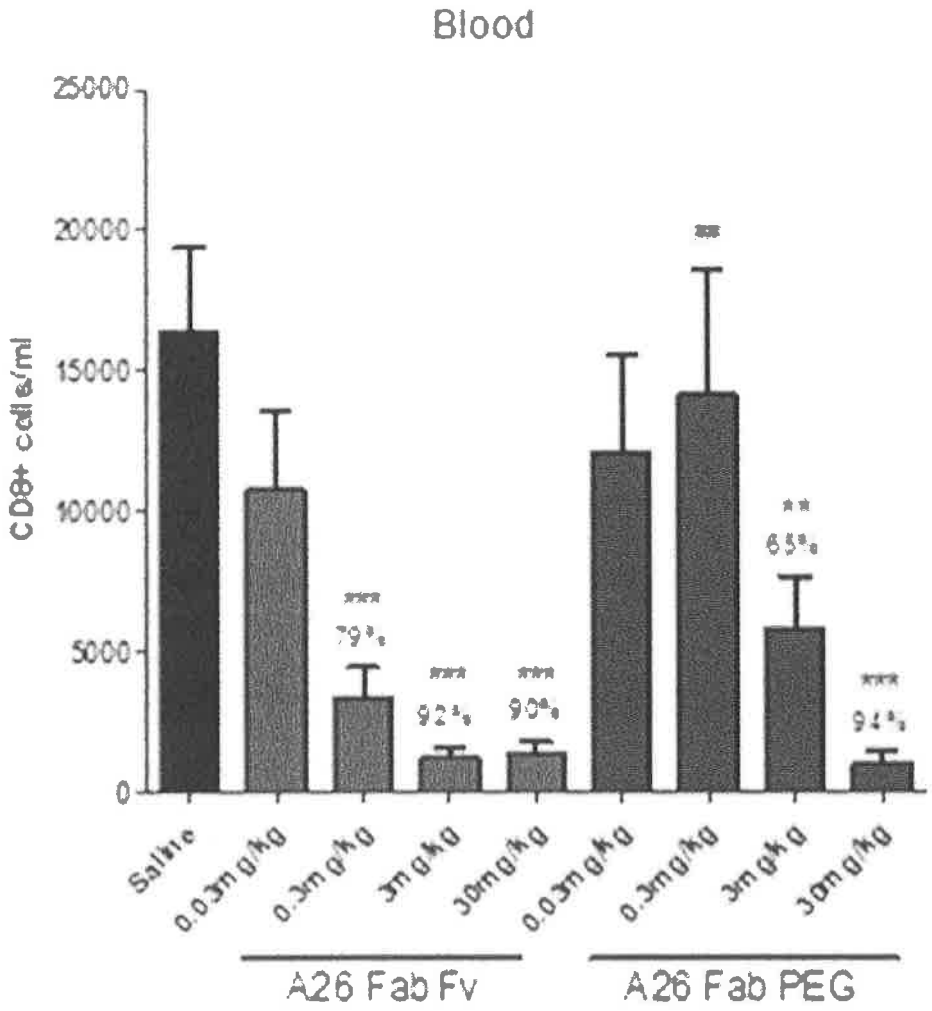


Figure 14C

A26 Fab-Fv administered prior to cell transfer dose dependently inhibits $CD4^+$ T cell proliferation in the Hu-NSG model

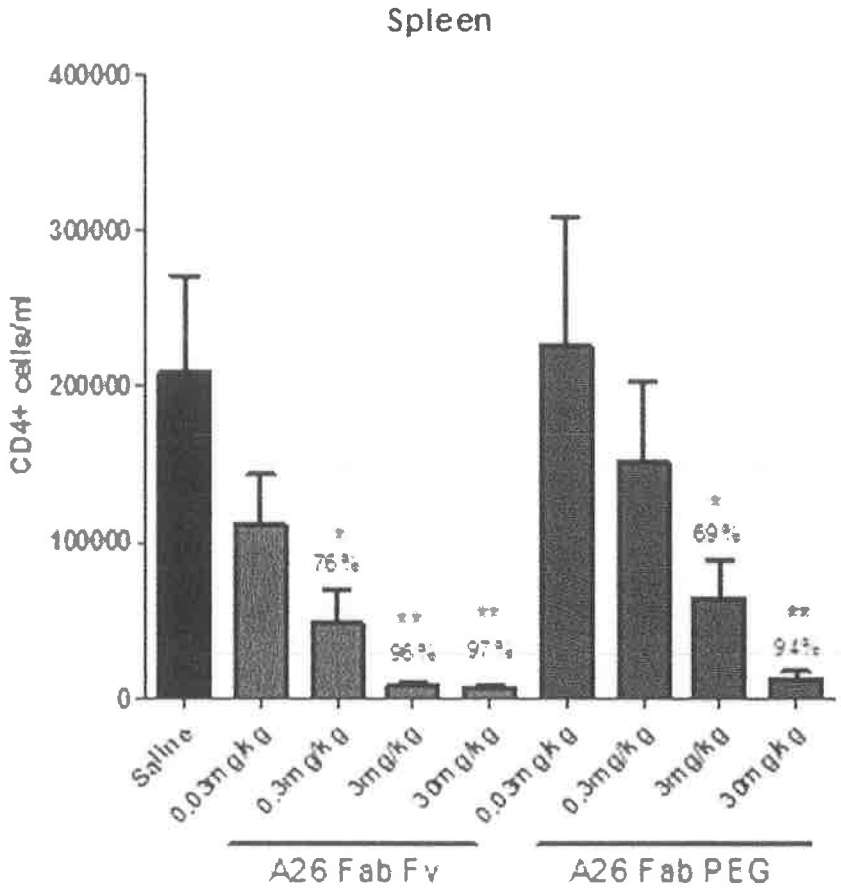


Figure 14D

A26 Fab-Fv administered prior to cell transfer dose dependently inhibits $CD4^+$ T cell proliferation in the Hu-NSG model

