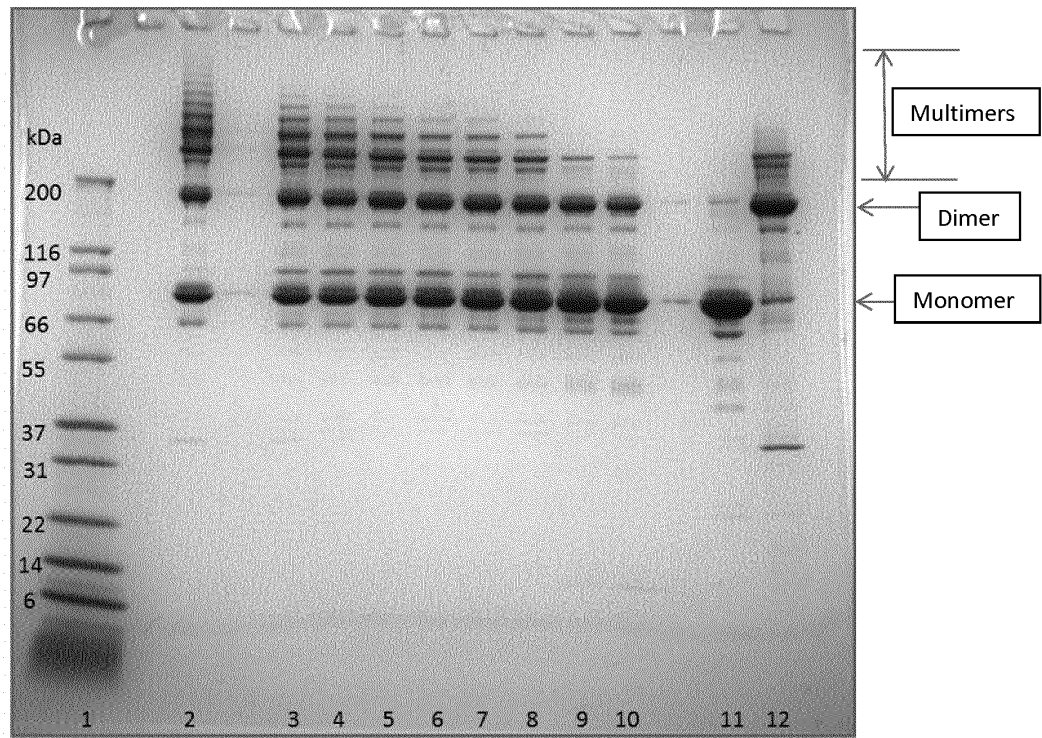
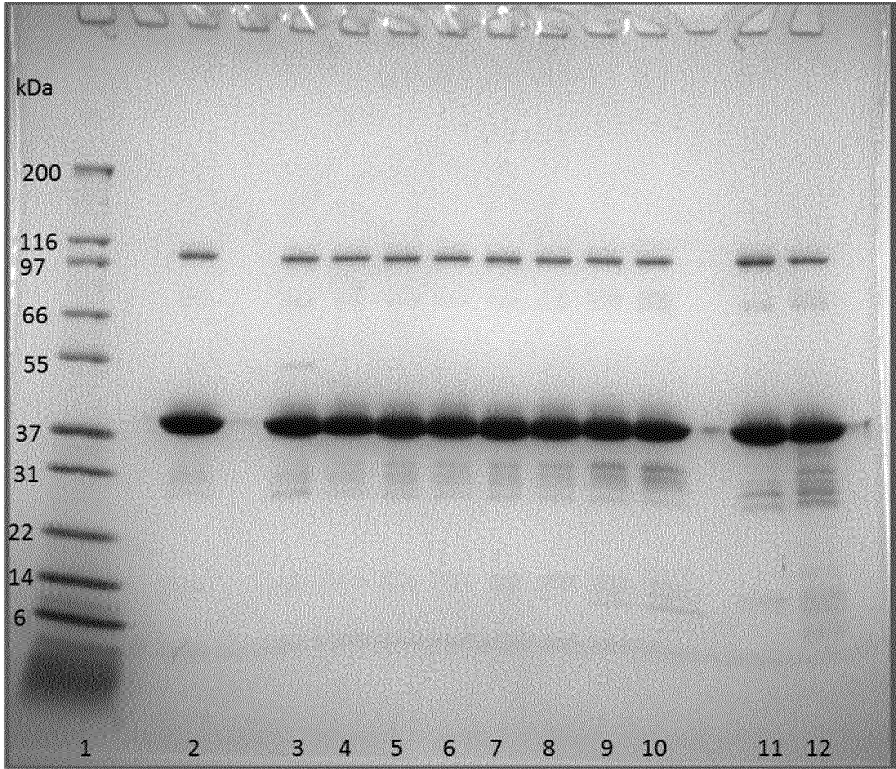


Figure 1



Lane	Sample
1	Novex Mark 12 Molecular Weight Markers
2	A26Fab-645dsFv Post Protein-A Purification
3	A26Fab-645dsFv Conversion @ Time 00:30
4	A26Fab-645dsFv Conversion @ Time 01:00
5	A26Fab-645dsFv Conversion @ Time 02:00
6	A26Fab-645dsFv Conversion @ Time 03:00
7	A26Fab-645dsFv Conversion @ Time 04:00
8	A26Fab-645dsFv Conversion @ Time 05:00
9	A26Fab-645dsFv Conversion @ Time 20:20
10	A26Fab-645dsFv Conversion @ Time 44:14
11	A26Fab-645dsFv Monomer Reference Material
12	A26Fab-645dsFv Multimer Reference Material

Figure 2



Lane	Sample
1	Novex Mark 12 Molecular Weight Markers
2	A26Fab-645dsFv Post Protein-A Purification
3	A26Fab-645dsFv Conversion @ Time 00:30
4	A26Fab-645dsFv Conversion @ Time 01:00
5	A26Fab-645dsFv Conversion @ Time 02:00
6	A26Fab-645dsFv Conversion @ Time 03:00
7	A26Fab-645dsFv Conversion @ Time 04:00
8	A26Fab-645dsFv Conversion @ Time 05:00
9	A26Fab-645dsFv Conversion @ Time 20:20
10	A26Fab-645dsFv Conversion @ Time 44:14
11	A26Fab-645dsFv Monomer Reference Material
12	A26Fab-645dsFv Multimer Reference Material

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Figure 3

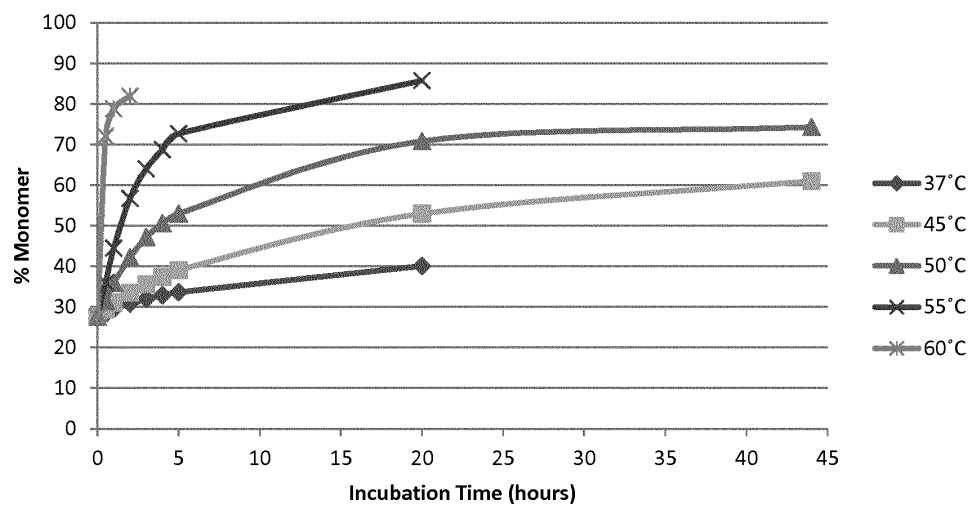
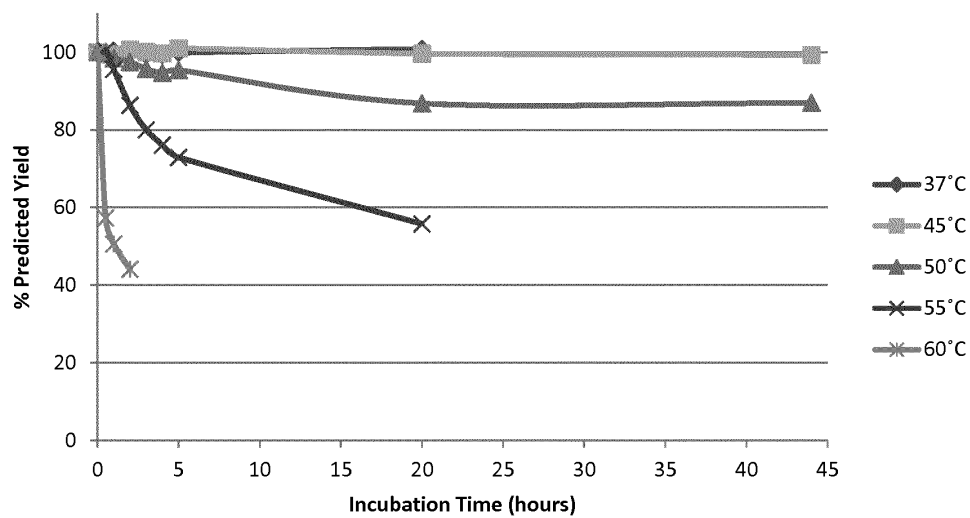


Figure 4



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Figure 5

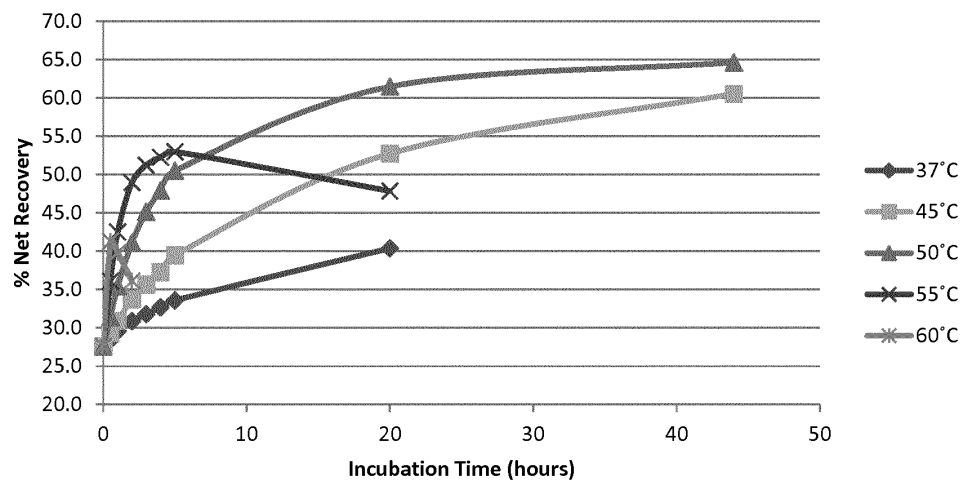
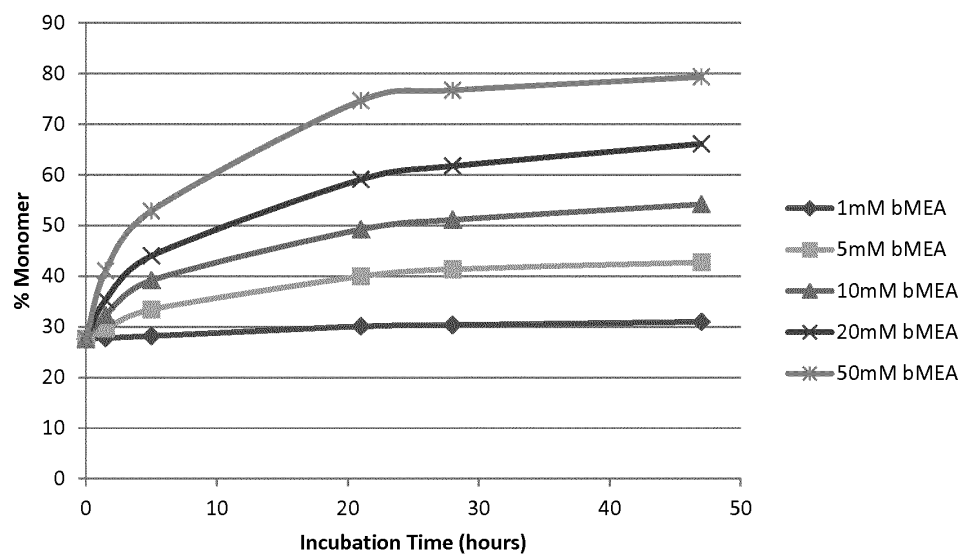


Figure 6



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Figure 7

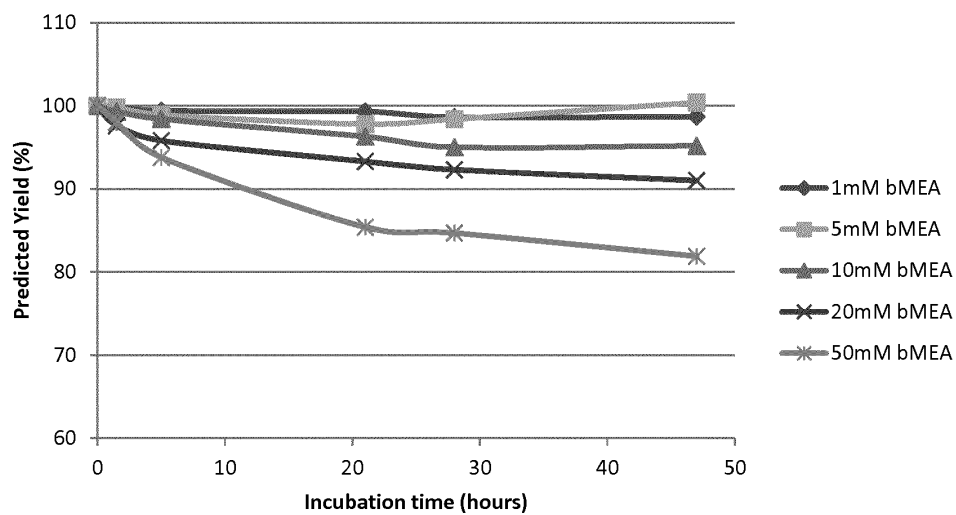
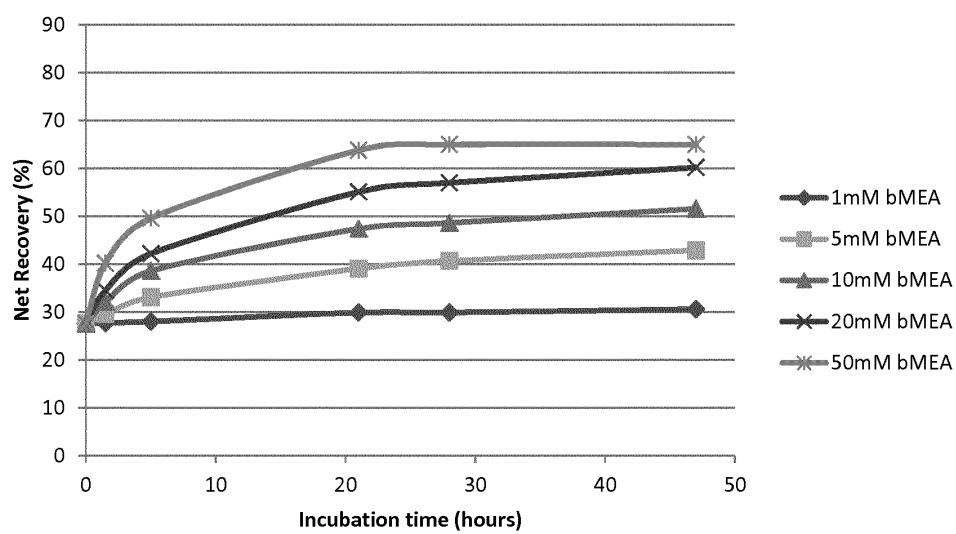
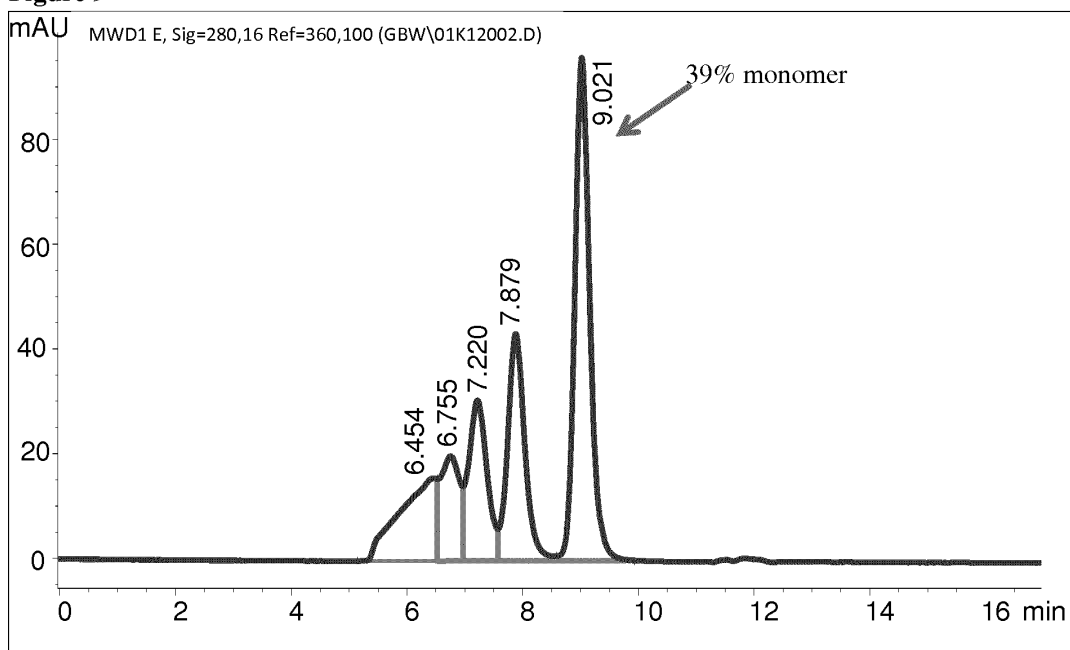
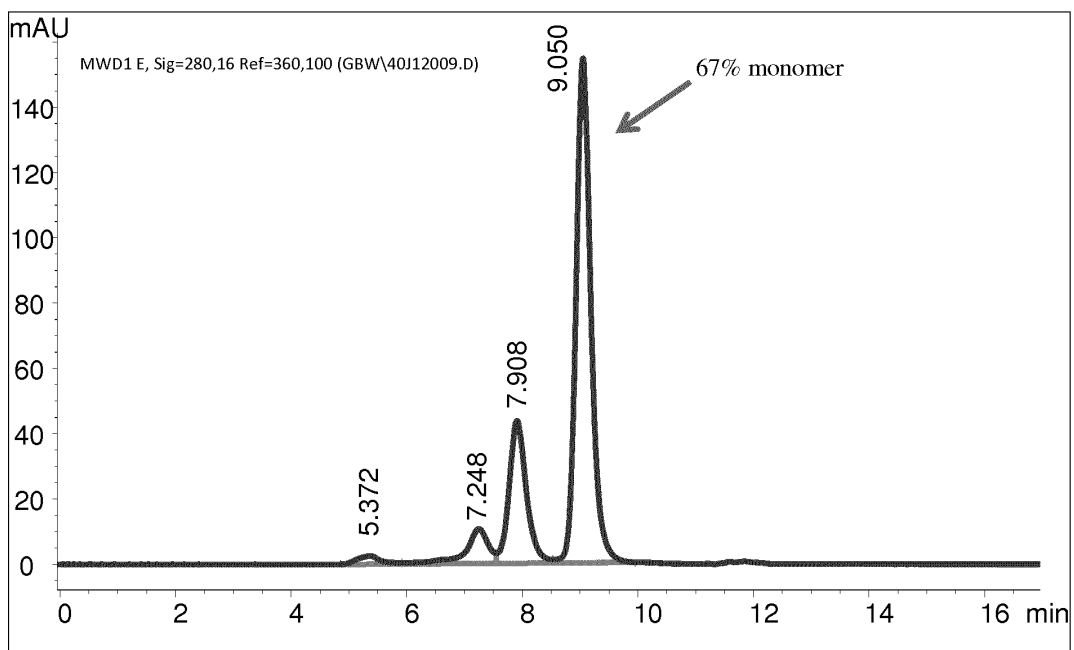


Figure 8

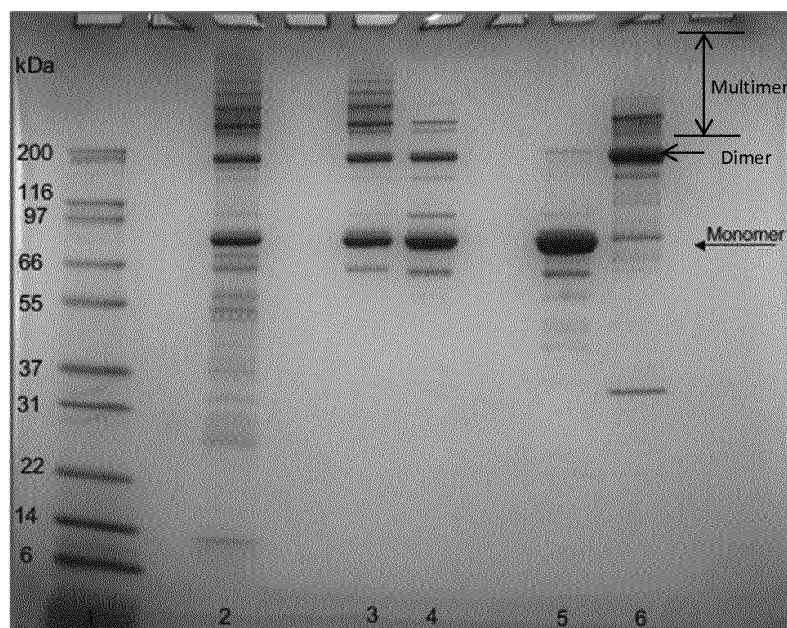


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Figure 9**Figure 10**

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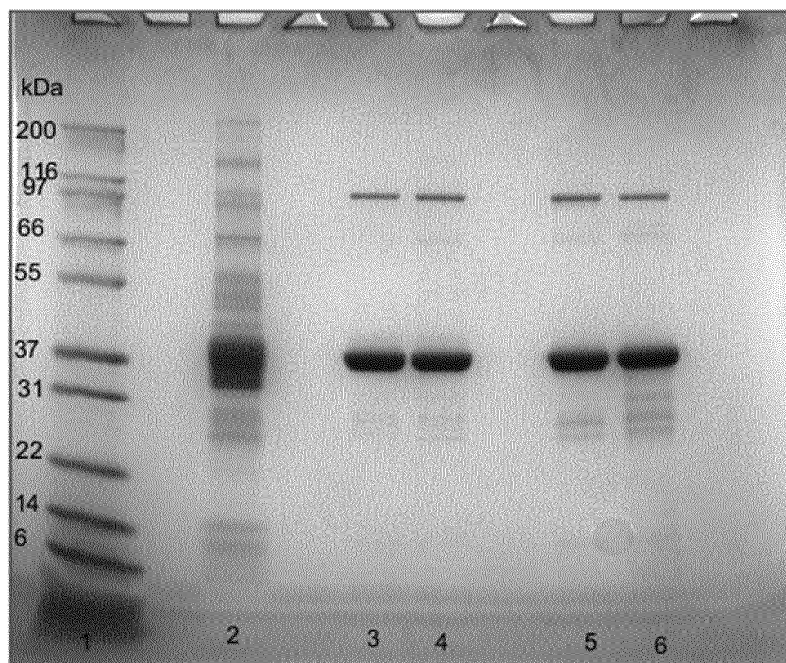
Figure 11



Lane	Sample
1	Novex Mark 12 Molecular Weight Markers
2	A26Fab-645dsFv Clarified Cell Culture Supernatant
3	A26Fab-645dsFv MabSelect Elution @ pH 3.5 (No conversion)
4	A26Fab-645dsFv MabSelect Elution @ pH 3.5 (Supernatant conversion)
5	A26Fab-645dsFv Monomer Reference
6	A26FabFv-645Fv Multimer Reference

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Figure 12



Lane	Sample
1	Novex Mark 12 Molecular Weight Markers
2	A26Fab-645dsFv Clarified Cell Culture Supernatant
3	A26Fab-645dsFv MabSelect Elution @ pH 3.5 (No conversion)
4	A26Fab-645dsFv MabSelect Elution @ pH 3.5 (Supernatant conversion)
5	A26Fab-645dsFv Monomer Reference
6	A26Fab-645dsFv Multimer Reference

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Figure 13

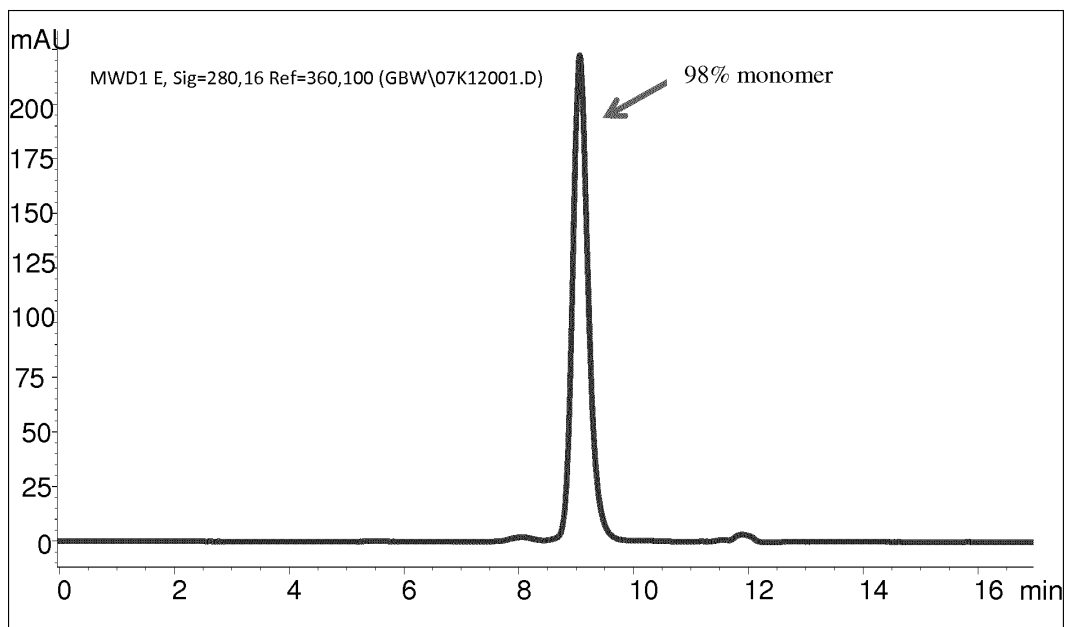


Figure 14

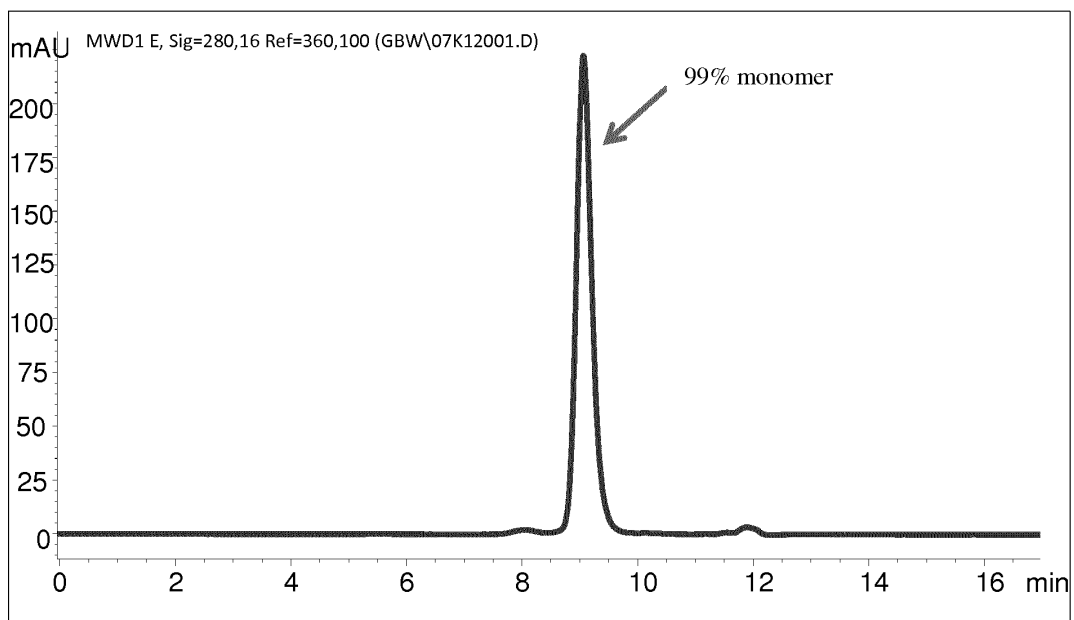
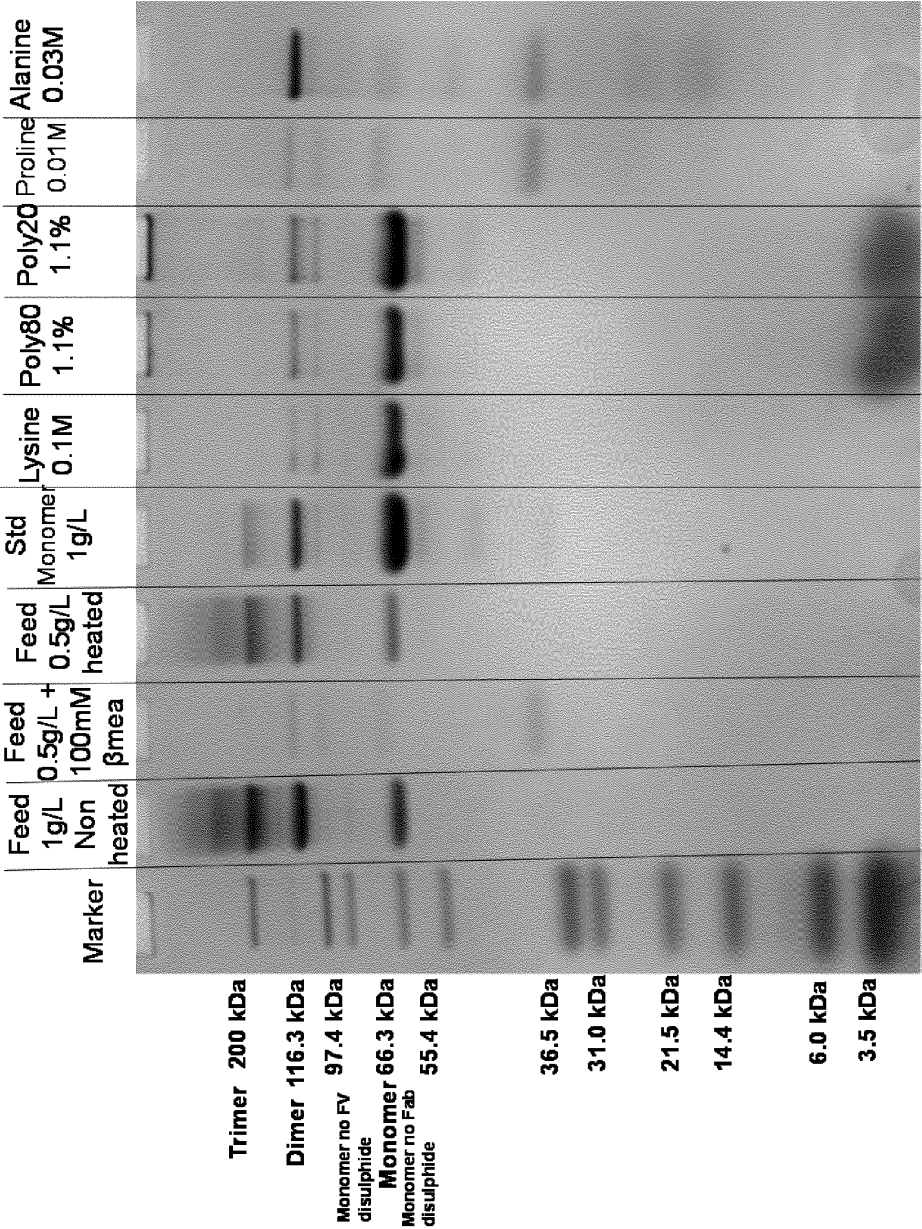
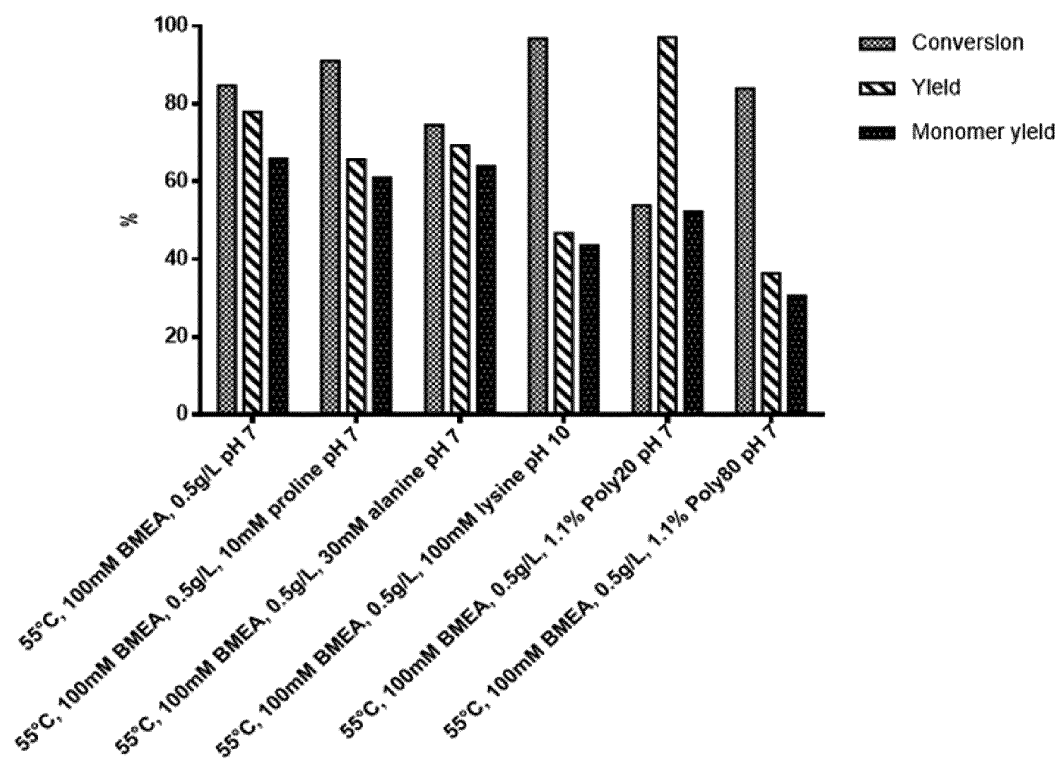


Figure 15



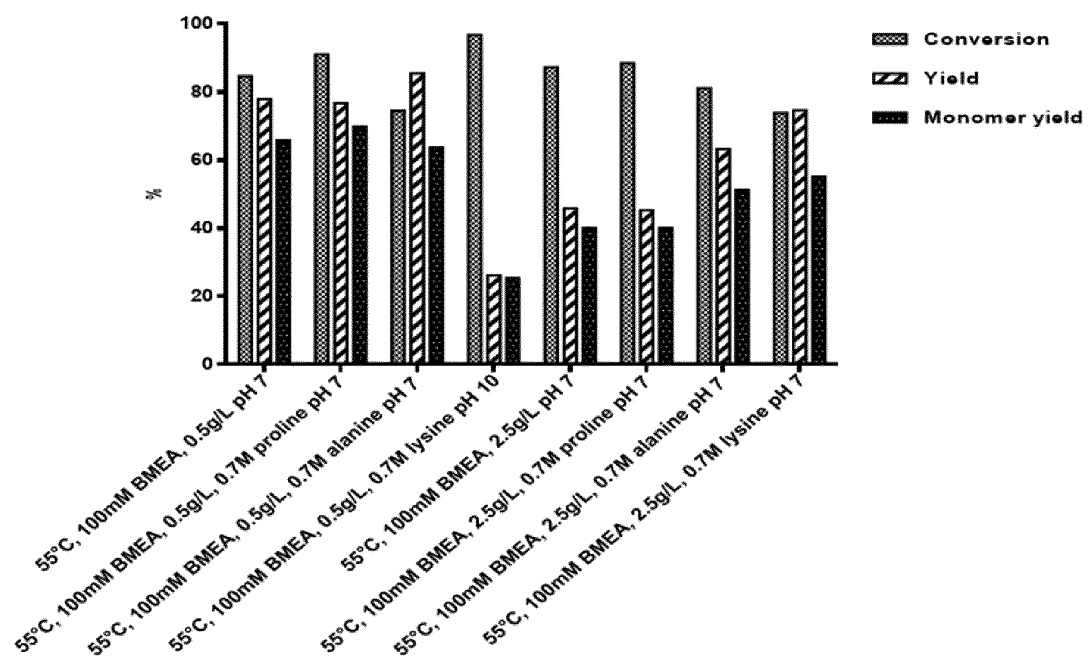
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Figure 16a



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Figure 16b



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Figure 17a

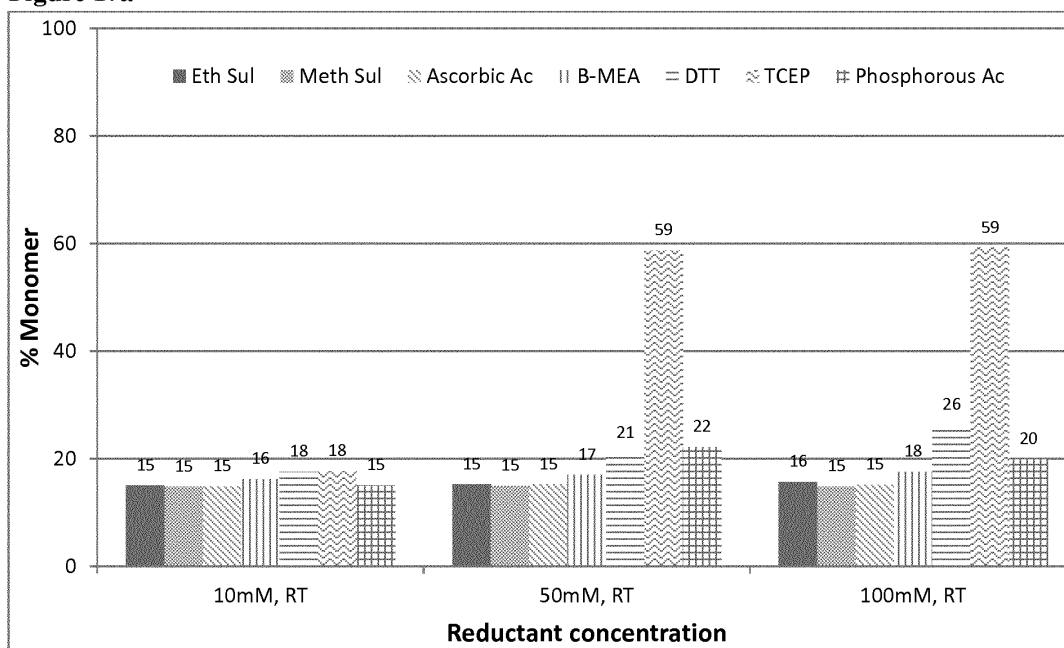
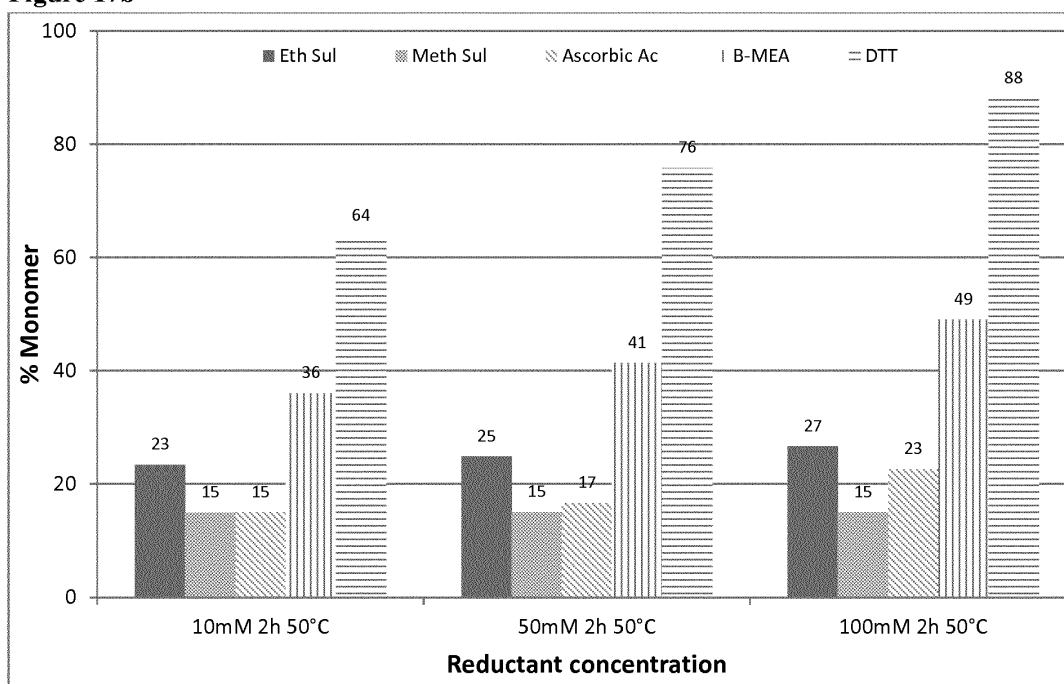


Figure 17b



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Figure 18a

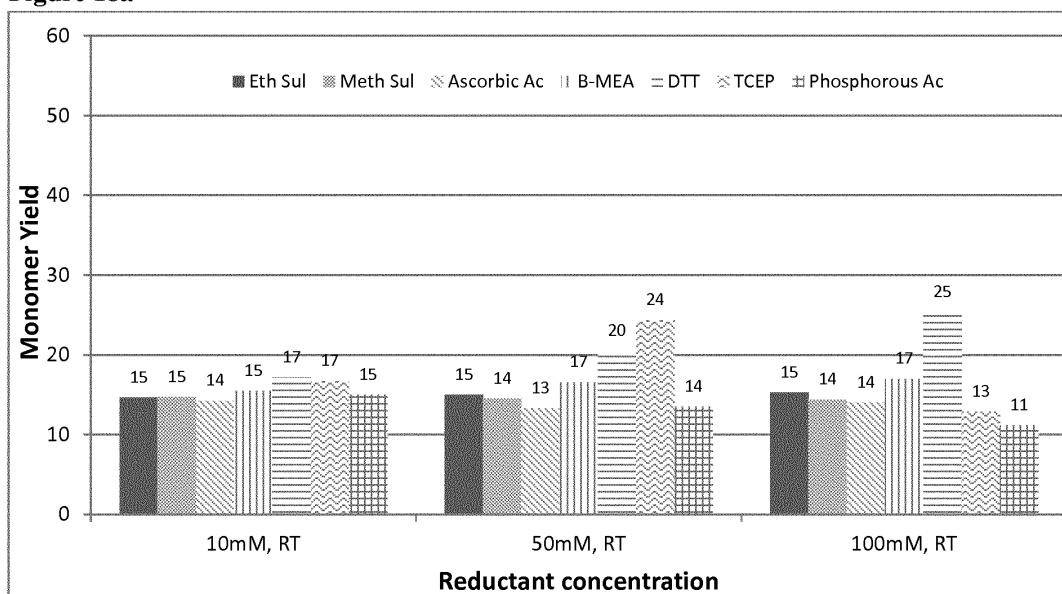


Figure 18b

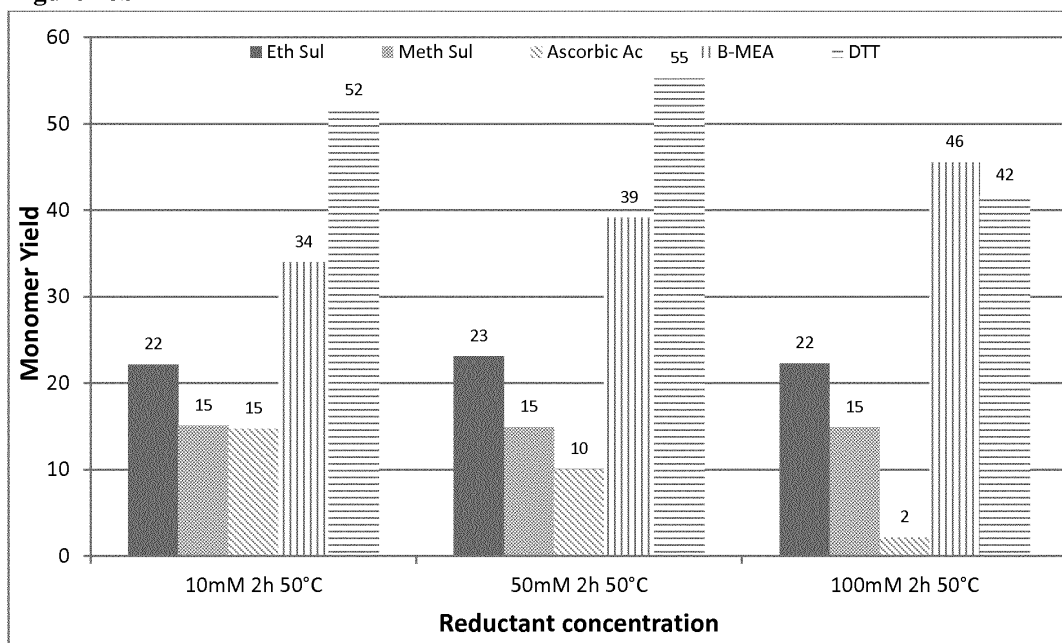


Figure 19

(a) Light chain variable region of antibody A26 specific to OX40 (SEQ ID NO:7)

DIQMTQSPSSLSASVGDRVTITCRATQSIYNALAWYQQKPGKAPKLLIYNANTLHTGVPS
RFSASGSGTDSLTISSLQPEDFATYYCQQYYDYPLTFGGGTKVEIKR

(b) Heavy chain variable region of antibody A26 specific to OX40 (SEQ ID NO:8)

EVQLVESGGGLVQPGGSLRLSCAASGFTFTNYGIHWIRQAPGKGLEWVASISPSGGLTY
YRDSVKGRFTISRDDAKNSPYLQMNSLRAEDTAVYYCATGGEGIFDYWGQGTLLTVSS

(c)

CDRH1: NYGIH (SEQ ID NO:1)

CDRH2: SISPSGGLTYRDSVKG (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)

DIQMTQSPSSLSASVGDRVTITCRATQSIYNALAWYQQKPGKAPKLLIYNANTLHTGVPS
RFSASGSGTDSLTISSLQPEDFATYYCQQYYDYPLTFGGGTKVEIKRTVAAPSVFIFPPS
DEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYSLSSTL
TLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

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

EVQLVESGGGLVQPGGSLRLSCAASGFTFTNYGIHWIRQAPGKGLEWVASISPSGGLTY
YRDSVKGRFTISRDDAKNSPYLQMNSLRAEDTAVYYCATGGEGIFDYWGQGTLLTVSS
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSS
GLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSC

Figure 20

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

EVQLLES GGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKCLEWIGIIWASGTTFYA
TWAKGRFTISRDN SKNTVY LQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGT LV
TVSS

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

DIQMTQSPSSVSASVGDRVTITCQSSPSVWSNFLSWYQQKPGKAPKLLIYEASKLTSGVP
SRFSGSGSGTDFTLTIS SLQPEDFATYYCGGGYSSISD TTFGCGTKVEIKRT

(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)

EVQLVES GGGLVQPGGSLRLSCAASGFTFTNYGIHWIRQAPGKGLEWVASISPSGGLTY
YRDSVKGRFTISRDDAKNSPYLQMNSLRAEDTAVYYCATGGEGIFDYWGQGT LVTVSS
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSS
GLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCSGGGGSGGGGTGGGGS
EVQLLES GGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKCLEWIGIIWASGTTFYA
TWAKGRFTISRDN SKNTVY LQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGT LV
TVSS

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

DIQMTQSPSSLSASVGDRVTITCRATQSIYNALAWYQQKPGKAPKLLIYNANTLHTGVPS
RFSASGSGTDSTLTIS SLQPEDFATYYCQQYYDYPLTFGGGTKVEIKRTVAAPSVFIFPPS
DEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYLSSTL
TL SKADYEEKHKVYACEVTHQGLSSPVTKSFNRGECGGGGSGGGGSGGGGSDIQMTQSP
SSVSASVGDRVTITCQSSPSVWSNFLSWYQQKPGKAPKLLIYEASKLTSGVPSRFSGSGS
GTDFTLTIS SLQPEDFATYYCGGGYSSISD TTFGCGTKVEIKRT

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Figure 21

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

EVQLLESGGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKCLEWIGIHWASGTTFYA
TWAKGRFTISRDTSTTVYLQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGLVTVS
S

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

DIVMTQSPSSVSASVGDRVTITCQSSPSVWSNFLSWYQQKPGKAPKLLIYEASKLTSGVP
SRFKGSGSGTDFTLTISSLQPEDFATYYCGGGYSSISDITTFGCGTKVEIK

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

EVQLVESGGGLVQPGGSLRLSCAASGFTFTNYGIHWIRQAPGKGLEWVASISPSGGLTY
YRDSVKGRFTISRDDAKNSPYLQMNSLRAEDTAVYYCATGGEGIFDYWGQGLVTVSS
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSS
GLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCSGGGGSGGGGSGGGGS
EVQLLESGGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKCLEWIGIHWASGTTFYA
TWAKGRFTISRDTSTTVYLQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGLVTVS
S

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

DIQMTQSPSSLSASVGDRVTITCRATQSIYNALAWYQQKPGKAPKLLIYNANTLHTGVPS
RFSASGSGTDSTLTISSLQPEDFATYYCQQYYDYPLTFGGGTKVEIKRTVAAPSVFIFPPS
DEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYSLSSTL
TLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGECSGGGGSGGGGSGGGGSDIVMTQS
PSSVSASVGDRVTITCQSSPSVWSNFLSWYQQKPGKAPKLLIYEASKLTSGVPSRFRKSG
SGTDFTLTISSLQPEDFATYYCGGGYSSISDITTFGCGTKVEIK

Figure 22

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

ATGAAGAAGACTGCTATAGCGATCGCAGTGGCGCTAGCTGGTTTTCGCCACCGTGGC
GCAAGCTGAAGTTCAGCTGGTCGAGTCTGGAGGCGGGCTTGTCCAGCCTGGAGGGA
GCCTGCGTCTCTTGTGTCAGCAAGCGGTTTCACGTTACCAACTACGGTATCCACT
GGATTCTGTCAGGCACCAGGTAAAGGTCTGGAATGGGTAGCCTCTATCTCTCCGTCTG
GTGGTCTGACGTACTACCGTGACTCTGTCAAAGGTCGTTTCACCATCTCTCGTGATG
ACGCGAAAACTCTCCGTACCTGCAAATGAACTCTCTGCGTGCAGAAGATACCGCA
GTGTACTACTGCGCTACTGGTGGTGAAGGTATCTTCGACTACTGGGGTCAGGGTACC
CTGGTAACTGTCTCGAGCGCTTCTACAAAGGGCCCAAGCGTTTTCCCACTGGCTCCG
TCCTCTAAATCCACCTCTGGTGGTACGGCTGCACTGGGTTGCCTGGTGAAAGACTAC
TTCCCAGAACCAGTTACCGTGTCTTGGAACCTCTGGTGCACCTGACCTCTGGTGTTTAC
ACCTTTCCAGCAGTTCTCCAGTCTTCTGGTCTGTACTCCCTGTCTAGCGTGGTTACCG
TTCCGTCTTCTTCTCTGGGTACTCAGACCTACATCTGCAACGTCAACCACAAACCGTC
CAACACCAAGGTCGACAAAAAAGTCGAGCCGAAATCCTGTAGTGGAGGTGGGGGCT
CAGGTGGAGGCGGGACCGGTGGAGGTGGCAGCGAGGTTCAACTGCTTGAGTCTGGA
GGAGGCCTAGTCCAGCCTGGAGGGAGCCTGCGTCTCTTGTGTCAGTAAGCGGCATC
GACCTGAGCAATTACGCCATCAACTGGGTGAGACAAGCTCCGGGGAAGTGTTTAGA
ATGGATCGGTATAATATGGGCCAGTGGGACGACCTTTTATGCTACATGGGCGAAAG
GAAGGTTTACAATTAGCCGGGACAATAGCAAAAACACCGTGTATCTCCAAATGAAC
TCCTTGCGAGCAGAGGACACGGCGGTGTACTATTGTGCTCGCACTGTCCCAGGTTAT
AGCACTGCACCTACTTCGATCTGTGGGGACAAGGGACCCTGGTGACTGTTTCAAGT
TAA

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

GAAGTTCAGCTGGTCGAGTCTGGAGGCGGGCTTGTCCAGCCTGGAGGGAGCCTGCG
TCTCTCTTGTGTCAGCAAGCGGTTTCACGTTACCAACTACGGTATCCACTGGATTCTG
CAGGCACCAGGTAAAGGTCTGGAATGGGTAGCCTCTATCTCTCCGTCTGGTGGTCTG
ACGTACTACCGTGACTCTGTCAAAGGTCGTTTCACCATCTCTCGTGATGACGCGAAA
AACTCTCCGTACCTGCAAATGAACTCTCTGCGTGCAGAAGATACCGCAGTGTACTAC
TGCGCTACTGGTGGTGAAGGTATCTTCGACTACTGGGGTCAGGGTACCCTGGTAACT
GTCTCGAGCGCTTCTACAAAGGGCCCAAGCGTTTTCCCACTGGCTCCGTCTCTAAA
TCCACCTCTGGTGGTACGGCTGCACTGGGTTGCCTGGTGAAAGACTACTTCCCAGAA
CCAGTTACCGTGTCTTGGAACCTCTGGTGCACCTGACCTCTGGTGTTTACACCTTTCCAG
CAGTTCTCCAGTCTTCTGGTCTGTACTCCCTGTCTAGCGTGGTTACCGTTCCGTCTTCT
TCTCTGGGTACTCAGACCTACATCTGCAACGTCAACCACAAACCGTCCAACACCAAG
GTCGACAAAAAAGTCGAGCCGAAATCCTGTAGTGGAGGTGGGGGCTCAGGTGGAGG
CGGGACCGGTGGAGGTGGCAGCGAGGTTCAACTGCTTGAGTCTGGAGGAGGCCTAG
TCCAGCCTGGAGGGAGCCTGCGTCTCTTGTGTCAGTAAGCGGCATCGACCTGAGCA
ATTACGCCATCAACTGGGTGAGACAAGCTCCGGGGAAGTGTTTAGAATGGATCGGT

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ATAATATGGGCCAGTGGGACGACCTTTTATGCTACATGGGCGAAAGGAAGGTTTAC
AATTAGCCGGGACAATAGCAAAAACACCGTGTATCTCCAAATGAACTCCTTGCGAG
CAGAGGACACGGCGGTGTACTATTGTGCTCGCACTGTCCCAGGTTATAGCACTGCAC
CCTACTTCGATCTGTGGGGACAAGGGACCCTGGTGACTGTTTCAAGTTAA

Figure 23

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

ATGAAAAAGACAGCTATCGCAATTGCAGTGGCGTTGGCTGGTTTCGCGACCGTTGCG
CAAGCTGATATCCAGATGACCCAGAGCCCAAGCAGTCTCTCCGCCAGCGTAGGCGA
TCGTGTGACTATTACCTGTCGTGCAACCCAGAGCATCTACAACGCTCTGGCTTGGTA
TCAGCAGAAACCGGGTAAAGCGCCAAAACCTCCTGATCTACAACGCGAACACTCTGC
ATACTGGTGTTCGCTCTCGTTTCTCTGCGTCTGGTTCTGGTACGGACTCTACTCTGAC
CATCTCCTCTCTCCAGCCGGAAGATTTTCGCGACCTACTACTGCCAGCAGTACTACGA
TTACCCACTGACGTTTGGTGGTGGTACCAAAGTTGAGATCAAACGTACGGTTGCAGC
TCCATCCGTCTTCATCTTTCCACCGTCTGACGAACAGCTCAAATCTGGTACTGCTTCT
GTCGTTTGCCTCCTGAACAACCTTCTATCCGCGTGAAGCGAAAGTCCAGTGGAAAGTC
GACAACGCACTCCAGTCTGGTAACTCTCAGGAATCTGTGACCGAACAGGACTCCAA
AGACTCCACCTACTCTCTGTCTAGCACCCCTGACTCTGTCCAAAGCAGACTACGAGAA
ACACAAAGTGTAACGCTTGCGAAGTTACCCATCAGGGTCTGAGCTCTCCGGTTACCAA
ATCCTTTAATAGAGGGGAGTGTGGTGGCGGTGGCAGTGGTGGTGGAGGTTCCGGAG
GTGGCGGTTTCAGACATACAAATGACCCAGAGTCCTTCATCGGTATCCGCGTCCGTTG
GCGATAGGGTGACTATTACATGTCAAAGCTCTCCTAGCGTCTGGAGCAATTTTCTAT
CCTGGTATCAACAGAAACCGGGGAAGGCTCCAAAACCTTCTGATTTATGAAGCCTCG
AAACTCACCAGTGGAGTTCCGTCAAGATTCAGTGGCTCTGGATCAGGGACAGACTTC
ACGTTGACAATCAGTTTCGCTGCAACCAGAGGACTTTGCGACCTACTATTGTGGTGGAA
GGTTACAGTAGCATAAGTGATACGACATTTGGGTGCGGTACTAAGGTGGAAATCAA
ACGTACCTAA

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

GATATCCAGATGACCCAGAGCCCAAGCAGTCTCTCCGCCAGCGTAGGCGATCGTGT
GACTATTACCTGTCGTGCAACCCAGAGCATCTACAACGCTCTGGCTTGGTATCAGCA
GAAACCGGGTAAAGCGCCAAAACCTCCTGATCTACAACGCGAACACTCTGCATACTG
GTGTTCCGTCTCGTTTCTCTGCGTCTGGTTCTGGTACGGACTCTACTCTGACCATCTC
CTCTCTCCAGCCGGAAGATTTTCGCGACCTACTACTGCCAGCAGTACTACGATTACCC
ACTGACGTTTGGTGGTGGTACCAAAGTTGAGATCAAACGTACGGTTGCAGCTCCATC
CGTCTTCATCTTTCCACCGTCTGACGAACAGCTCAAATCTGGTACTGCTTCTGTCGTT
TGCCTCCTGAACAACCTTCTATCCGCGTGAAGCGAAAGTCCAGTGGAAAGTCGACAA
CGCACTCCAGTCTGGTAACTCTCAGGAATCTGTGACCGAACAGGACTCCAAAGACTC
CACCTACTCTCTGTCTAGCACCCCTGACTCTGTCCAAAGCAGACTACGAGAAACACAA
AGTGTACGCTTGCGAAGTTACCCATCAGGGTCTGAGCTCTCCGGTTACCAAATCCTT
TAATAGAGGGGAGTGTGGTGGCGGTGGCAGTGGTGGTGGAGGTTCCGGAGGTGGCG
GTTTCAGACATACAAATGACCCAGAGTCCTTCATCGGTATCCGCGTCCGTTGGCGATA
GGGTGACTATTACATGTCAAAGCTCTCCTAGCGTCTGGAGCAATTTTCTATCCTGGT
ATCAACAGAAACCGGGGAAGGCTCCAAAACCTTCTGATTTATGAAGCCTCGAAACTC
ACCAGTGGAGTTCCGTCAAGATTCAGTGGCTCTGGATCAGGGACAGACTTCACGTTG

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ACAATCAGTTCGCTGCAACCAGAGGACTTTGCGACCTACTATTGTGGTGGAGGTTAC
AGTAGCATAAGTGATACGACATTTGGGTGCGGTACTAAGGTGGAAATCAAACGTAC
CTAA

Figure 24

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

ATGGAATGGTCCCTGGGTCTTCCTGTTTTTCCTTTCTGTCACAACCGGGGTGCACAGCG
AGGTGCAGCTCGTCGAGTCTGGAGGCGGGCTTGTCAGCCTGGAGGGAGCCTGCGT
CTCTCTTGTCAGCAAGCGGTTTCACGTTACCAACTACGGTATCCACTGGATTTCGTC
AGGCACCAGGTAAAGGTCTGGAATGGGTAGCCTCTATCTCTCCGTCTGGTGGTCTGA
CGTACTACCGTGACTCTGTCAAAGGTCGTTTCACCATCTCTCGTGATGACGCGAAAA
ACTCTCCGTACCTGCAGATGAACTCTCTGCGTGCAGAAGATACCGCAGTGTACTACT
GCGCTACTGGTGGTGAAGGTATCTTCGACTACTGGGGTCAGGGTACCCTGGTAACTG
TCTCAAGCGCTTCTACAAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAGA
GCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAA
CCGGTGACGGTGTCTGTGGAATCAGGCGCCCTGACCAGCGGCGTGCACACCTTCCC
GGCTGTCTACAGTCCTCTGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTC
CAGCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAACA
CCAAGGTGGACAAGAAAGTTGAGCCCAAATCTTGTTCCGGAGGTGGCGGTTCCGGA
GGTGGCGGTACCGGTGGCGGTGGATCCGAAGTCCAGCTGCTTGAATCCGGAGGCGG
ACTCGTGCAGCCCGGAGGCAGTCTTCGCTTGTCCTGCGCTGTATCTGGAATCGACCT
GAGCAATTACGCCATCAACTGGGTGAGACAGGCACCTGGGAAATGCCTCGAATGGA
TCGGCATTATATGGGCTAGTGGGACGACCTTTTATGCTACATGGGCGAAGGGTAGAT
TCACAATCTCACGGGATAATAGTAAGAACACAGTGTACCTGCAGATGAACTCCCTGC
GAGCAGAGGATACCGCCGTTTACTATTGTGCTCGCACTGTCCCAGGTTATAGCACTG
CACCTACTTTGATCTGTGGGGGCAGGGCACTCTGGTCACCGTCTCGAGTTGA

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

GAGGTGCAGCTCGTCGAGTCTGGAGGCGGGCTTGTCAGCCTGGAGGGAGCCTGCG
TCTCTCTTGTCAGCAAGCGGTTTCACGTTACCAACTACGGTATCCACTGGATTTCG
CAGGCACCAGGTAAAGGTCTGGAATGGGTAGCCTCTATCTCTCCGTCTGGTGGTCTG
ACGTAATAACCGTGACTCTGTCAAAGGTCGTTTCACCATCTCTCGTGATGACGCGAAA
AACTCTCCGTACCTGCAGATGAACTCTCTGCGTGCAGAAGATACCGCAGTGTACTAC
TGCGCTACTGGTGGTGAAGGTATCTTCGACTACTGGGGTCAGGGTACCCTGGTAACT
GTCTCAAGCGCTTCTACAAAGGGCCCATCGGTCTTCCCCCTGGCACCCCTCCTCCAAG
AGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGA
ACCGGTGACGGTGTCTGTGGAATCAGGCGCCCTGACCAGCGGCGTGCACACCTTCC
CGGCTGTCTACAGTCCTCTGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCT
CCAGCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAAC
ACCAAGGTGGACAAGAAAGTTGAGCCCAAATCTTGTTCCGGAGGTGGCGGTTCCGG
AGGTGGCGGTACCGGTGGCGGTGGATCCGAAGTCCAGCTGCTTGAATCCGGAGGCG
GACTCGTGCAGCCCGGAGGCAGTCTTCGCTTGTCCTGCGCTGTATCTGGAATCGACC
TGAGCAATTACGCCATCAACTGGGTGAGACAGGCACCTGGGAAATGCCTCGAATGG
ATCGGCATTATATGGGCTAGTGGGACGACCTTTTATGCTACATGGGCGAAGGGTAGA

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TTCACAATCTCACGGGATAATAGTAAGAACACAGTGTACCTGCAGATGAACTCCCTG
CGAGCAGAGGATACCGCCGTTTACTATTGTGCTCGCACTGTCCCAGGTTATAGCACT
GCACCCTACTTTGATCTGTGGGGGCAGGGCACTCTGGTCACCGTCTCGAGTTGA

Figure 25

a) DNA encoding Light chain A26-645(gL4) including B72.3 leader sequence (SEQ ID NO:27)
ATGTCAGTTCCCACACAGGTGCTGGGCCTGCTTCTGTTGTGGCTCACCGATGCTAGG
TGTGATATCCAGATGACCCAGAGTCCAAGCAGTCTCTCCGCCAGCGTAGGCGATCGT
GTGACTATTACCTGTCGTGCAACCCAGAGCATCTACAACGCTCTGGCTTGGTATCAG
CAGAAACCGGGTAAAGCGCCAAAACCTCCTGATCTACAACGCGAACACTCTGCATAC
CGGTGTTCCGTCTCGTTTCTCTGCGTCTGGTTCTGGTACGGACTCTACTCTGACCATC
TCCTCTCTGCAGCCGGAAGATTTTCGCGACCTACTACTGCCAGCAGTACTACGATTAC
CCACTGACGTTTGGTGGTGGTACCAAAGTTGAGATCAAACGTACGGTGGCTGCACCA
TCTGTCTTCATCTTCCCCCATCTGATGAGCAGTTGAAGTCTGGCACTGCCTCTGTTG
TGTGCCTGCTGAATAACTTCTACCCTAGAGAGGCCAAAGTCCAGTGGAAGGTGGAT
AACGCCCTTCAATCCGGAAACTCCCAGGAGAGTGTCACTGAGCAGGACTCAAAGGA
CTCCACCTATAGCCTTAGCAGCACACTGACACTGAGCAAGGCTGACTACGAGAAAC
ACAAGGTCTACGCCTGCGAAGTGACACATCAAGGCCTGAGCTCACCCGTGACAAAG
AGCTTTAACAGGGGAGAGTGTGGTGGAGGTGGCTCTGGCGGTGGTGGCTCCGGAGG
CGGAGGAAGCGACATCCAGATGACCCAGAGCCCTTCCTCTGTAAGCGCCAGTGTCTG
GAGACAGAGTGACTATTACCTGCCAAAGCTCCCCCTCAGTCTGGTCCAATTTTCTAT
CCTGGTACCAGCAAAAGCCCGGAAAGGCTCCTAAATTGCTGATCTACGAAGCAAGC
AAACTCACCAGCGGCGTGCCAGCAGGTTTCAGCGGCAGTGGGTCTGGAAGTACTT
TACCCTGACAATCTCCTCACTCCAGCCCGAGGACTTCGCCACCTATTACTGCGGTGG
AGGTTACAGTAGCATAAGTGATACGACATTTGGATGCGGCACTAAAGTGGAATCA
AGCGTACCTGA

b) DNA encoding Light chain A26-645(gL4) (SEQ ID NO:28)
GATATCCAGATGACCCAGAGTCCAAGCAGTCTCTCCGCCAGCGTAGGCGATCGTGT
GACTATTACCTGTCGTGCAACCCAGAGCATCTACAACGCTCTGGCTTGGTATCAGCA
GAAACCGGGTAAAGCGCCAAAACCTCCTGATCTACAACGCGAACACTCTGCATACCG
GTGTTCCGTCTCGTTTCTCTGCGTCTGGTTCTGGTACGGACTCTACTCTGACCATCTC
CTCTCTGCAGCCGGAAGATTTTCGCGACCTACTACTGCCAGCAGTACTACGATTACCC
ACTGACGTTTGGTGGTGGTACCAAAGTTGAGATCAAACGTACGGTGGCTGCACCATC
TGTCTTCATCTTCCCCCATCTGATGAGCAGTTGAAGTCTGGCACTGCCTCTGTTGTG
TGCCTGCTGAATAACTTCTACCCTAGAGAGGCCAAAGTCCAGTGGAAGGTGGATAA
CGCCCTTCAATCCGGAAACTCCCAGGAGAGTGTCACTGAGCAGGACTCAAAGGACT
CCACCTATAGCCTTAGCAGCACACTGACACTGAGCAAGGCTGACTACGAGAAACAC
AAGGTCTACGCCTGCGAAGTGACACATCAAGGCCTGAGCTCACCCGTGACAAAGAG
CTTTAACAGGGGAGAGTGTGGTGGAGGTGGCTCTGGCGGTGGTGGCTCCGGAGGCG
GAGGAAGCGACATCCAGATGACCCAGAGCCCTTCCTCTGTAAGCGCCAGTGTCTGGA
GACAGAGTGACTATTACCTGCCAAAGCTCCCCCTCAGTCTGGTCCAATTTTCTATCCT
GGTACCAGCAAAAGCCCGGAAAGGCTCCTAAATTGCTGATCTACGAAGCAAGCAAA
CTCACCAGCGGCGTGCCAGCAGGTTTCAGCGGCAGTGGGTCTGGAAGTACTTTACC

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CTGACAATCTCCTCACTCCAGCCCCGAGGACTTCGCCACCTATTACTGCGGTGGAGGT
TACAGTAGCATAAGTGATACGACATTTGGATGCGGCACTAAAGTGGAATCAAGCG
TACCTGA

FIGURE 26

(a) Heavy chain variable domain of anti-albumin antibody (no ds) (SEQ ID NO:29)

EVQLLESGGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKGLEWIGIHWASGTTFY
ATWAKGRFTISRDN SKNTVY LQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGL
VTVSS

(b) Heavy chain variable domain of anti-albumin antibody (ds) (SEQ ID NO:30)

EVQLLESGGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKCLEWIGIHWASGTTFYA
TWAKGRFTISRDN SKNTVY LQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGLV
TVSS

(c) Light chain variable domain of anti-albumin antibody (no ds) (SEQ ID NO:31)

DIQMTQSPSSVSASVGDRVTITCQSSPSVWSNFLSWYQQKPGKAPKLLIYEASKLTSGVP
SRFSGSGSGTDFTLTISLQPEDFATYYCGGGYSSISDTTFGGGTKVEIKRT

(d) Light chain variable domain of anti-albumin antibody (ds) (SEQ ID NO:32)

DIQMTQSPSSVSASVGDRVTITCQSSPSVWSNFLSWYQQKPGKAPKLLIYEASKLTSGVP
SRFSGSGSGTDFTLTISLQPEDFATYYCGGGYSSISDTTFGCGTKVEIKRT

(e) Linker 1 (SEQ ID NO:33) SGGGSGGGGTGGGGS

(f) Linker 2 (SEQ ID NO:34) GGGSGGGGSGGGGS

645 gH5gL4 specific to albumin (SEQ ID NO: 35)

GAGGTTTCAGCTGCTGGAGTCTGGAGGCGGGCTTGTCCAGCCTGGAGGGAGCCTGCG
TCTCTCTTGTGCAGTAAGCGGCATCGACCTGTCCAACCTACGCGATTAACCTGGGTACG
TCAGGCACCGGGTAAAGGTCTGGAATGGATCGGCATCATCTGGGCCTCTGGTACGA
CCTTCTACGCTACTTGGGCCAAAGGTCGTTTCACCATCTCCCGTGACAACTCTAAAA
ACACCGTGTACCTGCAGATGAACTCTCTGCGTGCGGAAGACACTGCGGTTTACTATT
GCGCGCGTACCGTTCCGGGCTATTCTACTGCACCGTACTTCGACCTGTGGGGTCAGG
GTACTCTGGTTACCGTCTCGAGTGGAGGTGGCGGTTCTGGCGGTGGCGGTTCCGGTG
GCGGTGGATCGGGAGGTGGCGGTTCTGATATCCAGATGACCCAGAGTCCAAGCAGT
GTTTCCGCCAGCGTAGGCGATCGTGTGACTATTACCTGTCAGTCCCTCTCCGAGCGTTT
GGTCCAACCTCCTGAGCTGGTACCAGCAGAAACCGGGTAAAGCCCCGAAACTGCTG
ATCTACGAGGCGTCTAAACTGACCTCTGGTGTACCGTCCCGTTTCTCTGGCTCTGGCT
CTGGTACGGACTTCACTCTGACCATCTCCTCTCTGCAGCCGGAAGACTTTGCAACGT

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ACTACTGCGGTGGTGGTTACTCTTCCATCTCTGACACCACGTTCCGGTGGAGGCACCA
AAGTTGAAATCAAACGTACGCATCACCATCACCATCACCATCACCATCAC

645 gH5gL4 specific to albumin (SEQ ID NO: 36)

EVQLLESGGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKGLEWIGIIWASGTTFY
ATWAKGRFTISRDN SKNTVY LQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGT
LTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSVSASVGDRVTTTCQSSPSVWSNFL
SWYQQKPGKAPKLLIYEASKLTSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCGGGYS
SISDTTFGGGTKVEIKRTHHHHHHHHHH

645 gH5gL4ds specific to albumin (SEQ ID NO: 37)

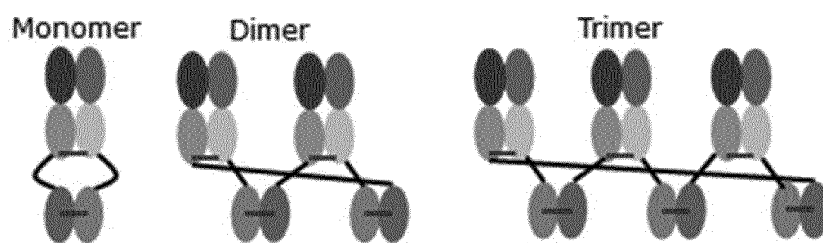
GAGGTTTCAGCTGCTGGAGTCTGGAGGCGGGCTTGTCACGCTGGAGGGAGCCTGCG
TCTCTCTTGTGCAGTAAGCGGCATCGACCTGTCCAACCTACGCGATTAACCTGGGTACG
TCAGGCACCGGGTAAATGCCTGGAATGGATCGGCATCATCTGGGCCTCTGGTACGAC
CTTCTACGCTACTTGGGCCAAAGGTCGTTTCACCATCTCCCGTGACAACTCTAAAAA
CACCGTGTACCTGCAGATGAACCTCTCTGCGTGCAGGAAGACACTGCGGTTTACTATTG
CGCGCGTACCGTTCGGGGCTATTCTACTGCACCGTACTTCGACCTGTGGGGTTCAGGG
TACTCTGGTTACCGTCTCGAGTGGAGGTGGCGGTTCTGGCGGTGGCGGTTCCGGTGG
CGGTGGATCGGGAGGTGGCGGTTCTGATATCCAGATGACCCAGAGTCCAAGCAGTG
TTTCCGCCAGCGTAGGCGATCGTGTGACTATTACCTGTCAGTCCTCTCCGAGCGTTTG
GTCCAACCTCCTGAGCTGGTACCAGCAGAAACCGGGTAAAGCCCCGAAACTGCTGA
TCTACGAGGCGTCTAAACTGACCTCTGGTGTACCGTCCCGTTTCTCTGGCTCTGGCTC
TGGTACGGA CTTC ACTCTGACCATCTCCTCTCTGCAGCCGGAAGACTTTGCAACGTA
CTACTGCGGTGGTGGTTACTCTTCCATCTCTGACACCACGTTTCGGTTGTGGCACCAA
AGTTGAAATCAAACGTACGCATCACCATCACCATCACCATCACCATCAC

645 gH5gL4ds specific to albumin (SEQ ID NO: 38)

EVQLLESGGGLVQPGGSLRLSCAVSGIDLSNYAINWVRQAPGKCLEWIGIIWASGTTFYA
TWAKGRFTISRDN SKNTVY LQMNSLRAEDTAVYYCARTVPGYSTAPYFDLWGQGT
LTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSVSASVGDRVTTTCQSSPSVWSNFLS
WYQQKPGKAPKLLIYEASKLTSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCGGGYSSI
SDTTFGCGTKVEIKRTHHHHHHHHHH

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FIGURE 27

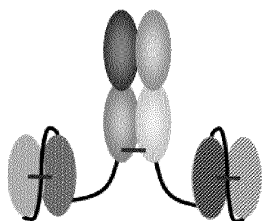
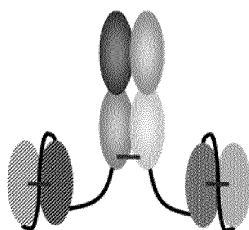
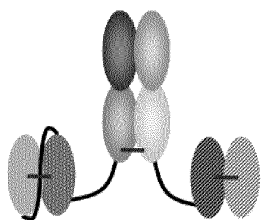
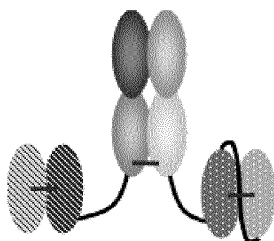


Fab = Heavy and Light Chain of Fab with a disulfide bond between the heavy and light chain and linkers joined to C-terminus of the constant region of the heavy chain and light chain to join to the dsFv



dsFv = disulfide stabilised Fv and linkers to join to the Fab

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FIGURE 28**Fab-2x dsScFv formats and Fab-dsScFv-dsFv format****Fab#2-(HC)-dsScFv#3-(LC)-dsScFv#4****Fab#2-(LC)-dsScFv#3-(HC)-dsScFv#4****Fab-(HC)dsScFv-(LC)dsFv****Fab-(HC)dsFv-(LC)dsScFv**

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FIGURE 29

