

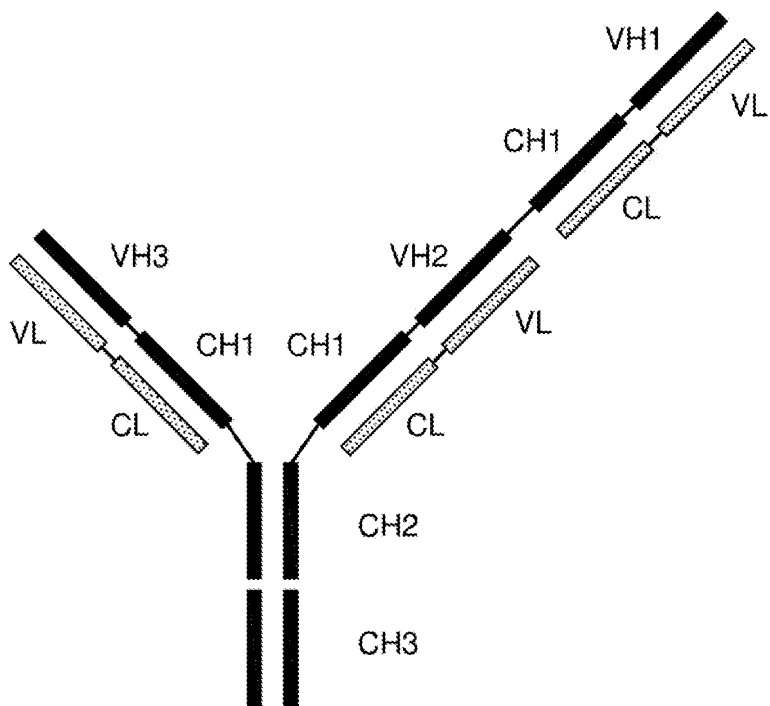


Fig. 1

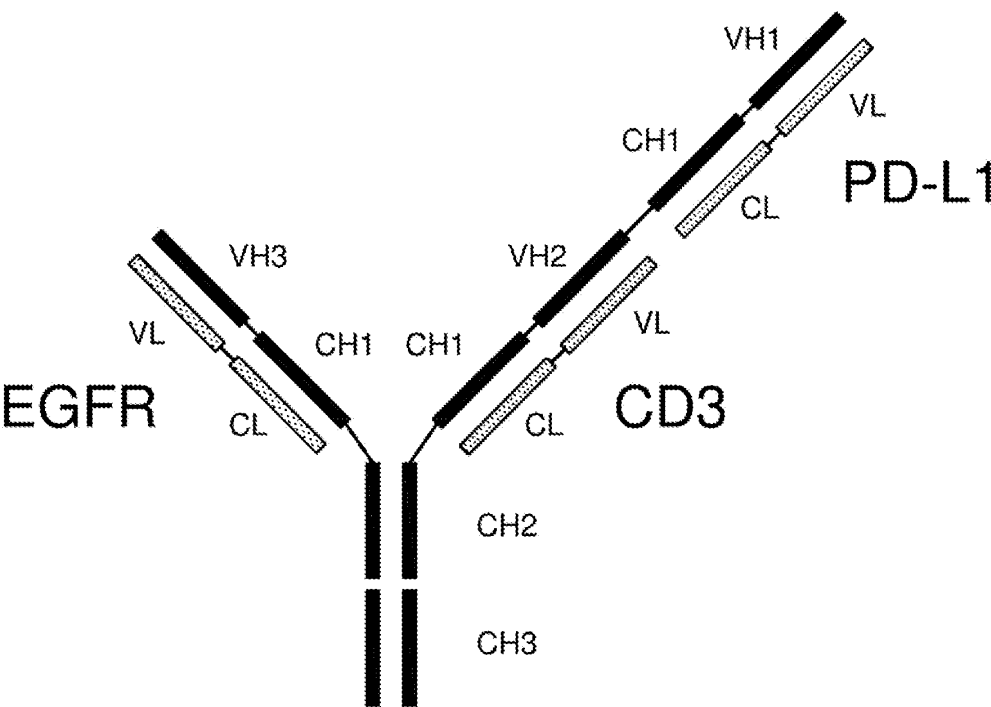


Fig. 2

Fig. 3A

DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFGSGS
GSGTDFTLTISSLPEDFATYYCQQSYSTPPTFGQGTKVEIK
RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDST
YLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 3B

gacatccagatgacccagtcctccatcctccctgtctgcatctgtaggagacagagtcacc
D I Q M T Q S P S S L S A S V G D R V T
atcacttgccgggcaagtcagagcattagcagctacttaaattggatcagcagaaacca
I T C R A S Q S I S S Y L N W Y Q Q K P
gggaaagcccctaagctcctgatctatgctgcatccagtttgcaaagtggggtcccatca
G K A P K L L I Y A A S S L Q S G V P S
aggttcagtgggcagtgatctgggacagatttcactctcaccatcagcagtcctgcaacct
R F S G S G S G T D F T L T I S S L Q P
gaagattttgcaacttactactgtcaacagagttacagtaccctccaacggttcggccaa
E D F A T Y Y C Q Q S Y S T P P T F G Q
gggaccaaggtggagatcaaa
G T K V E I K

Fig. 3C

cgaactgtggctgcaccatctgtcttcatcttcccgccatctgatgagcagttgaaatct
R T V A A P S V F I F P P S D E Q L K S
ggactgcctctgttgctgctgaataacttctatcccagagaggccaaagtag
G T A S V V C L L N N F Y P R E A K V Q
tggaagggtgataacgccctccaatcgggtaactcccaggagagtgacacagagcaggac
W K V D N A L Q S G N S Q E S V T E Q D
agcaaggacagcacctacagcctcagcagcacctgacgctgagcaaagcagactacgag
S K D S T Y S L S S T L T L S K A D Y E
aaacacaaagtctacgctgcgaagtcacccatcagggcctgagctcgcccggtcacaaag
K H K V Y A C E V T H Q G L S S P V T K
agcttcaacaggggagagtgtag
S F N R G E C -

Fig. 3D

DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAA
SSLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQSYSTPPTFGQGTKVEIK

Fig. 3E

DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAA
SSLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQSYSTP

Fig. 3F

CDR1 - QSISSY,
CDR2 - AAS,
CDR3 - QQSYSTPPT,
according to IMGT.

CDR1 - RASQSISSYLN,
CDR2 - AASSLQS,
CDR3 - QQSYSTPPT,
according to Kabat.

Fig.4A

CH1:

```
gctagcaccaagggcccatcggtcttccccctggcaccctcctccaagagcacctctggg
A S T K G P S V F P L A P S S K S T S G
ggcacagcgggccctgggctgectgggtcaaggactacttccccgaaccggtgacggtgtcg
G T A A L G C L V K D Y F P E P V T V S
tggaactcaggcgccctgaccagcggcgtgcacaccttcccggtgtcctacagtcctca
W N S G A L T S G V H T F P A V L Q S S
ggactctactccctcagcagcgtcgtgaccgtgccctccagcagcttgggcacccagacc
G L Y S L S S V V T V P S S S L G T Q T
tacatctgcaacgtgaatcacaagcccagcaacaccaaggtggacaagagagtt
Y I C N V N H K P S N T K V D K R V
```

Fig.4B

Hinge:

```
gagcccaaattcttgtgacaaaactcacacatgccaccgtgcca
E P K S C D K T H T C P P C P
```

Fig.4C

CH2:

```
gcacctgaactcctggggggaccgtcagtccttcttccccccaaaacccaaggacacc
A P E L L G G P S V F L F P P K P K D T
ctcatgatctcccgaccctgaggtcacatgcgtgggtgggtgacgtgagccacgaagac
L M I S R T P E V T C V V V D V S H E D
cctgaggtcaagttcaactggtacgtggacggcgtggaggtgcataatgccaagacaaag
P E V K F N W Y V D G V E V H N A K T K
ccgcgggaggagcagtacaacagcacgtaccgtgtgggtcagcgtcctcaccgtcctgcac
P R E E Q Y N S T Y R V V S V L T V L H
caggactgggtgaatggcaaggagtacaagtgaaggtctccaacaaagccctcccagcc
Q D W L N G K E Y K C K V S N K A L P A
cccatcgagaaaaccatctccaaagccaaa
P I E K T I S K A K
```

Fig.4D

CH3: L351K and T366K

```
gggcagccccgagaaccacaggtgtacaccaagcccccatcccgggaggagatgaccaag
  G Q P R E P Q V Y T K P P S R E E M T K
aaccaggtcagcctgaagtgcctggtcaaaggcttctatcccagcgacatcgccgtggag
  N Q V S L K C L V K G F Y P S D I A V E
tgggagagcaatgggcagccggagaacaactacaagaccacgcctcccgtgctggactcc
  W E S N G Q P E N N Y K T T P P V L D S
gacggctccttcttctctatagcaagctcaccgtggacaagagcaggtggcagcagggg
  D G S F F L Y S K L T V D K S R W Q Q G
aacgtcttctcatgctccgtgatgcatgaggctctgcacaaccactacacgcagaagagc
  N V F S C S V M H E A L H N H Y T Q K S
ctctccctgtctccgggttga
  L S L S P G -
```

Fig.4E

CH3: L351D and L368E

```
gggcagccccgagaaccacaggtgtacaccgaccccccatcccgggaggagatgaccaag
  G Q P R E P Q V Y T D P P S R E E M T K
aaccaggtcagcctgacctgcgaggtcaaaggcttctatcccagcgacatcgccgtggag
  N Q V S L T C E V K G F Y P S D I A V E
tgggagagcaatgggcagccggagaacaactacaagaccacgcctcccgtgctggactcc
  W E S N G Q P E N N Y K T T P P V L D S
gacggctccttcttctctatagcaagctcaccgtggacaagagcaggtggcagcagggg
  D G S F F L Y S K L T V D K S R W Q Q G
aacgtcttctcatgctccgtgatgcatgaggctctgcacaaccactacacgcagaagagc
  N V F S C S V M H E A L H N H Y T Q K S
ctctccctgtctccgggttga
  L S L S P G -
```

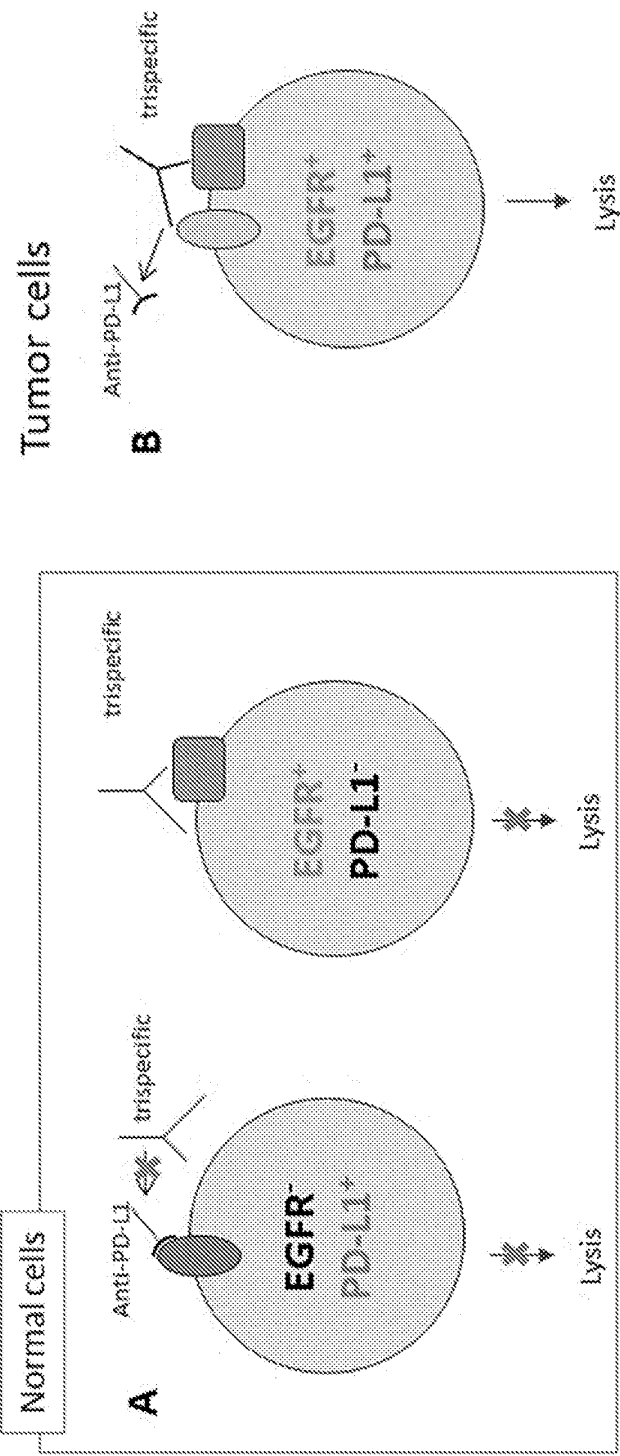


Fig. 5

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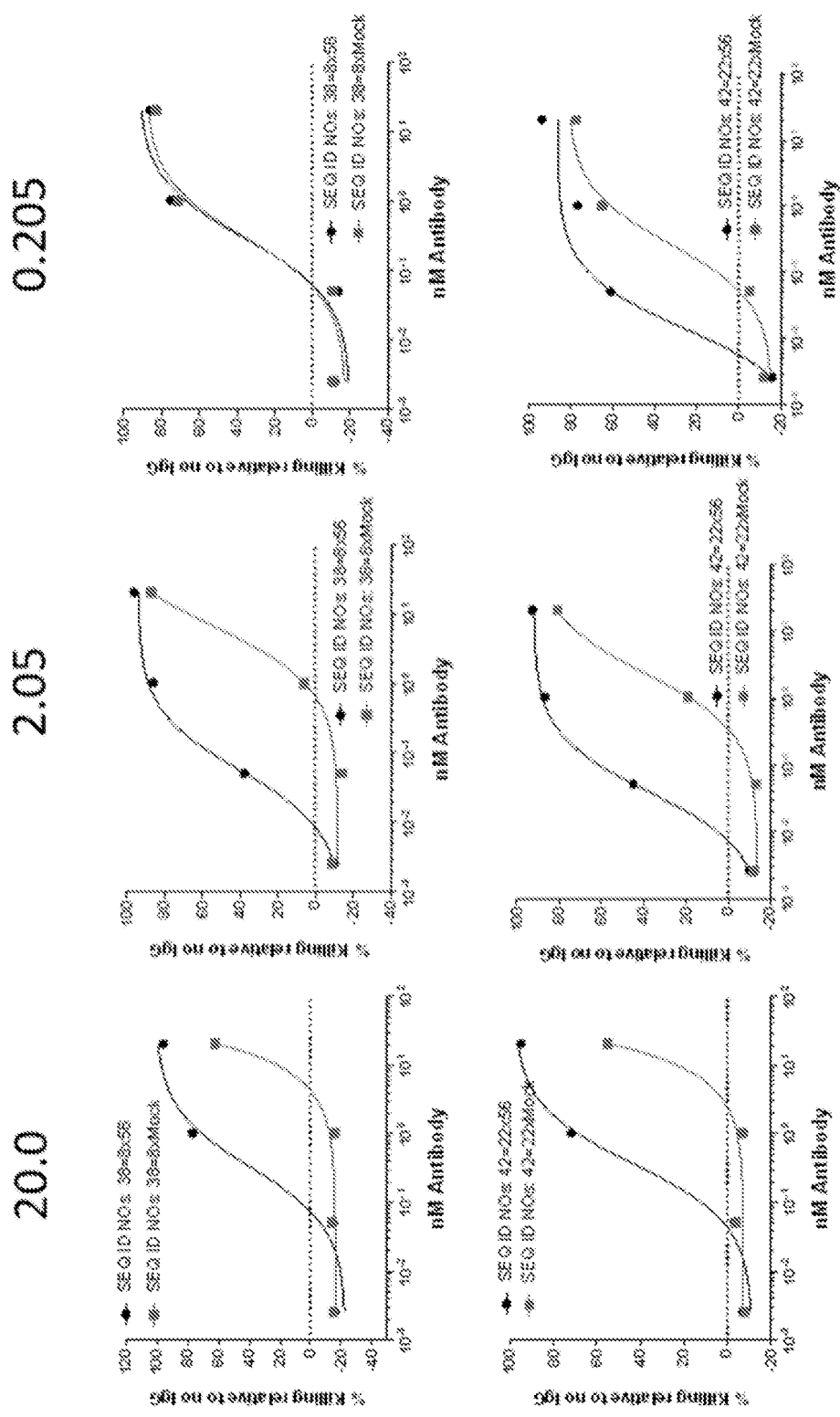


Fig. 6A, (1-2)

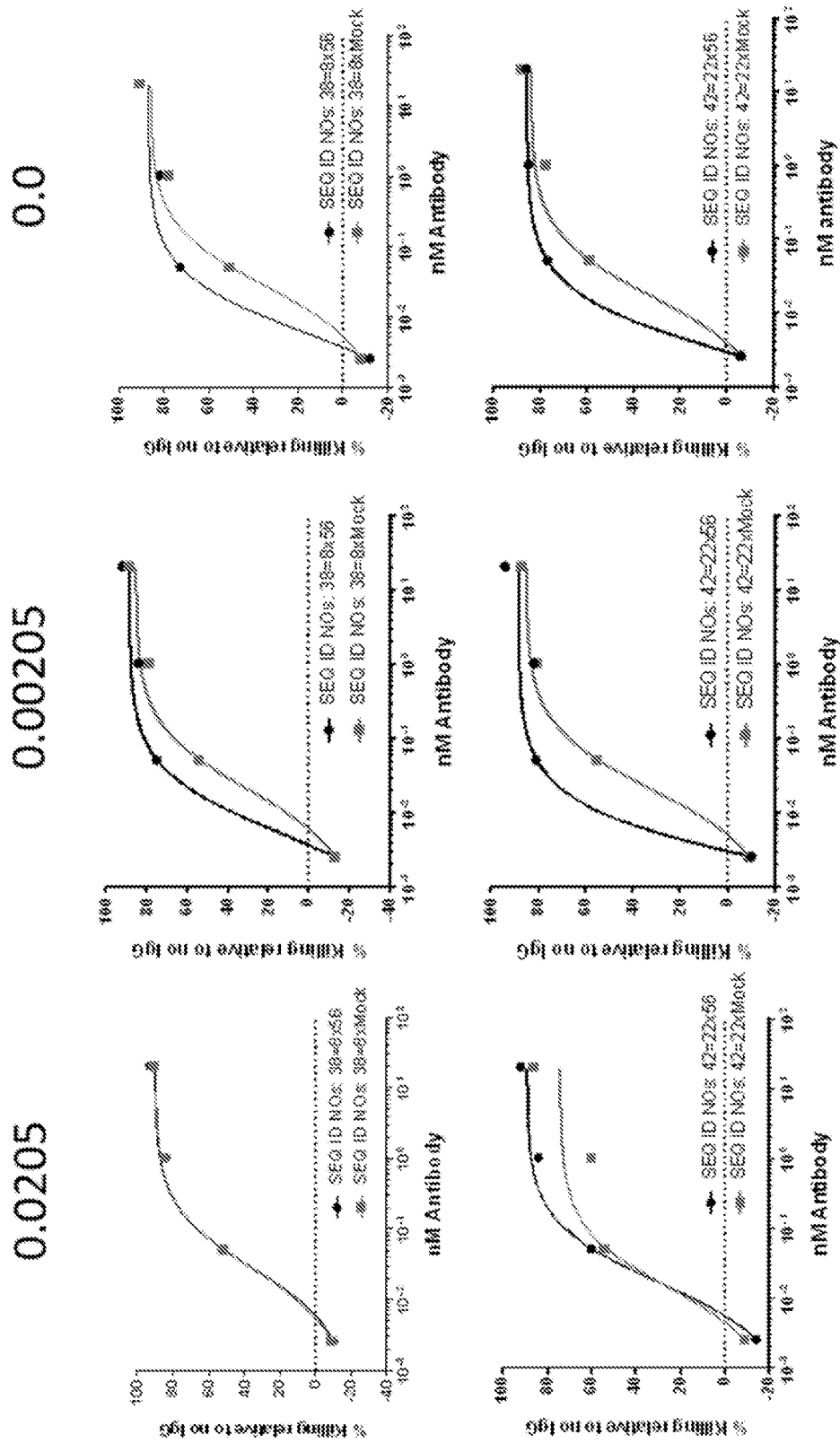


Fig. 6A, (2-2)

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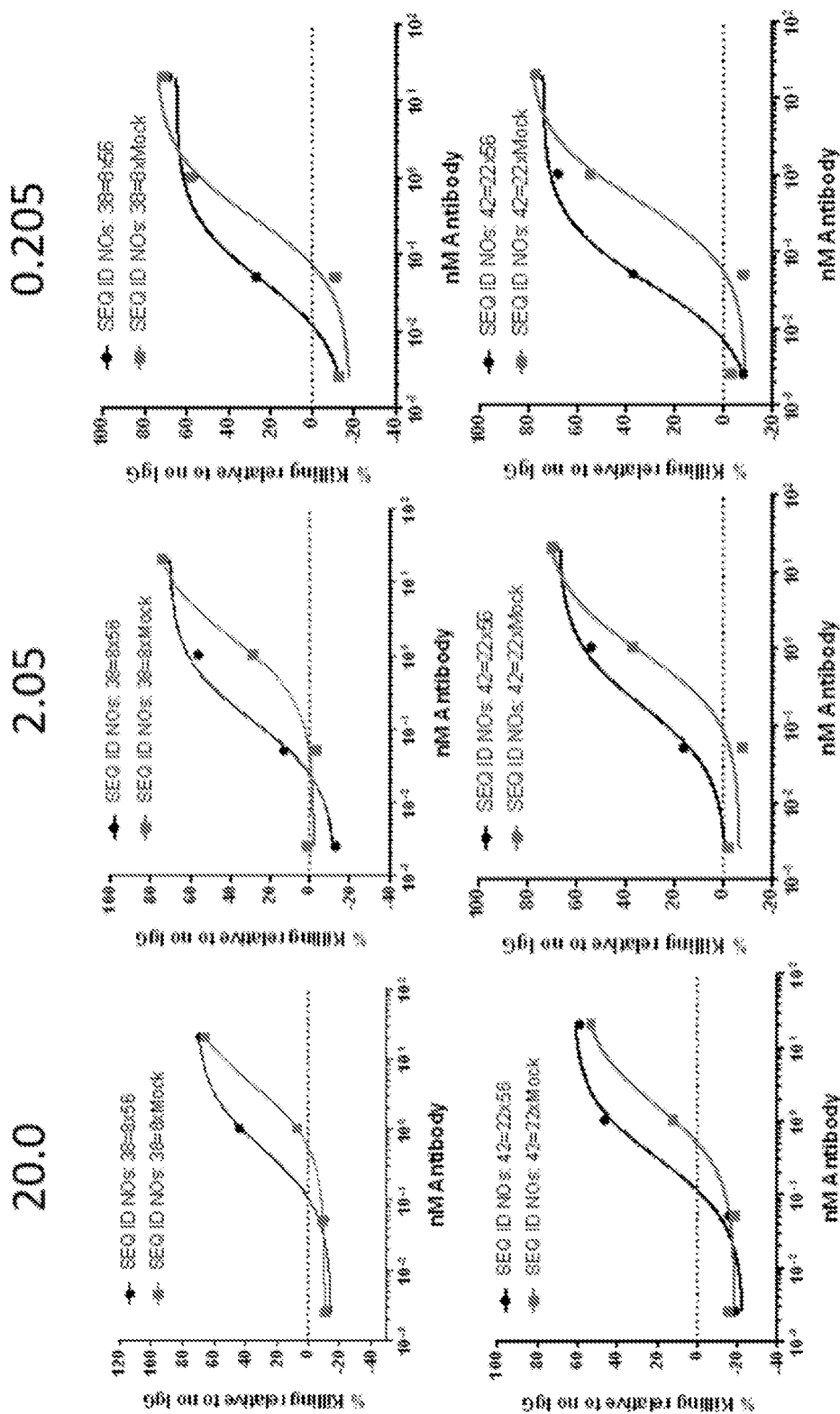


Fig. 6B, (1-2)

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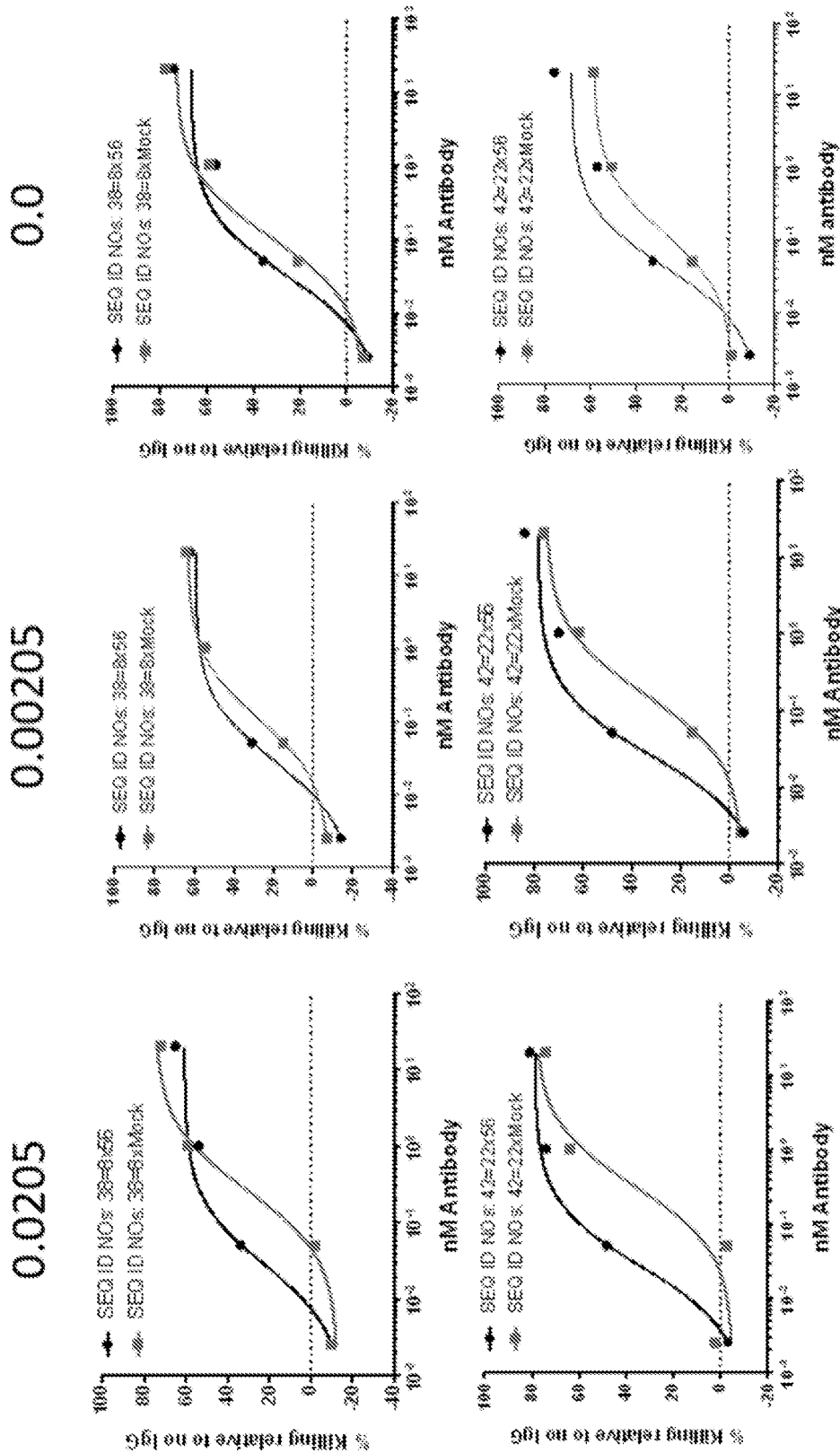


Fig. 6B, (2-2)

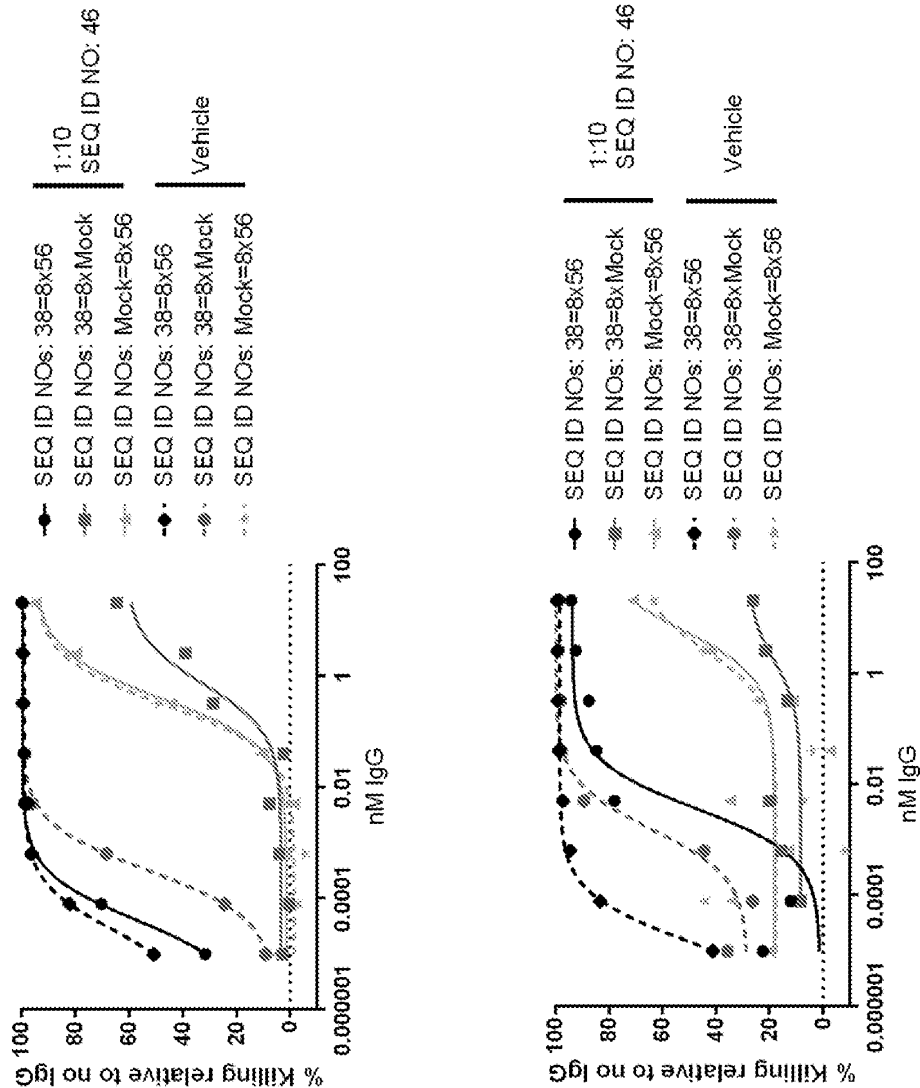


Fig. 7, (1-3)

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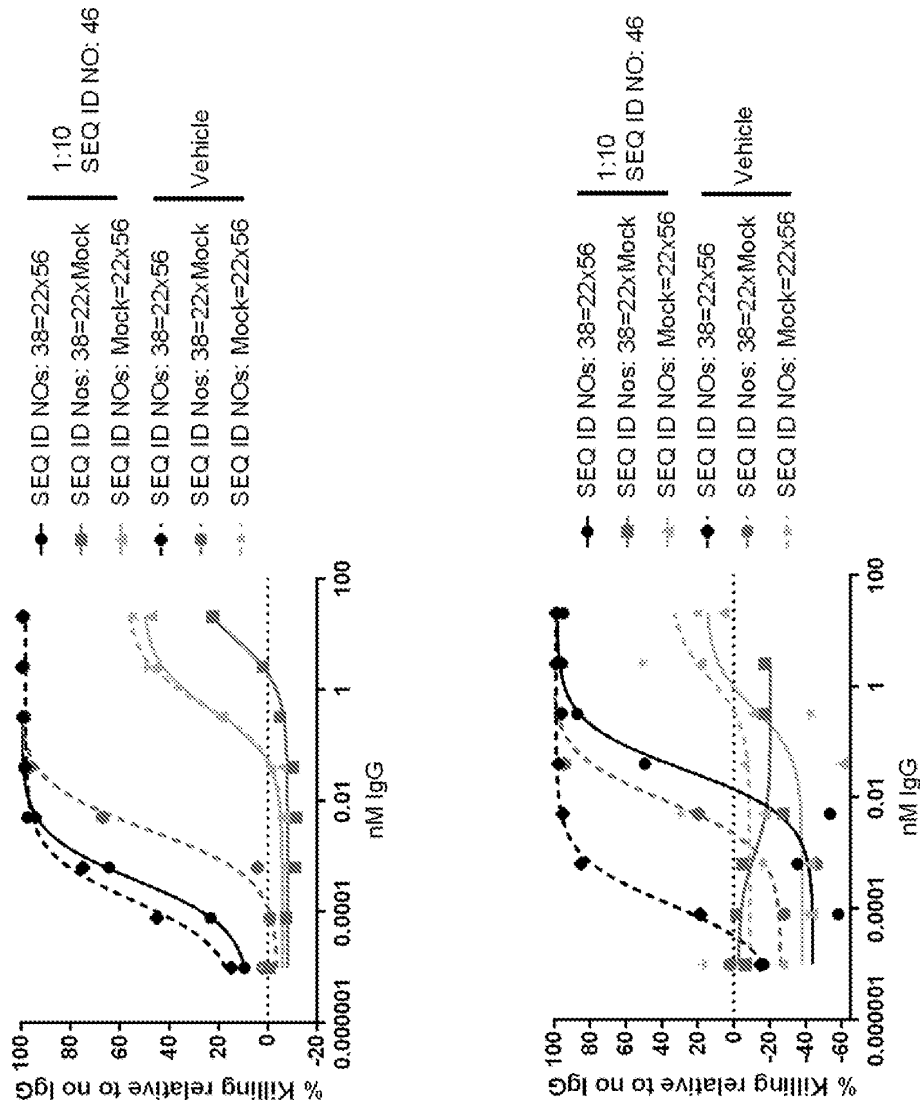


Fig. 7, (2-3)

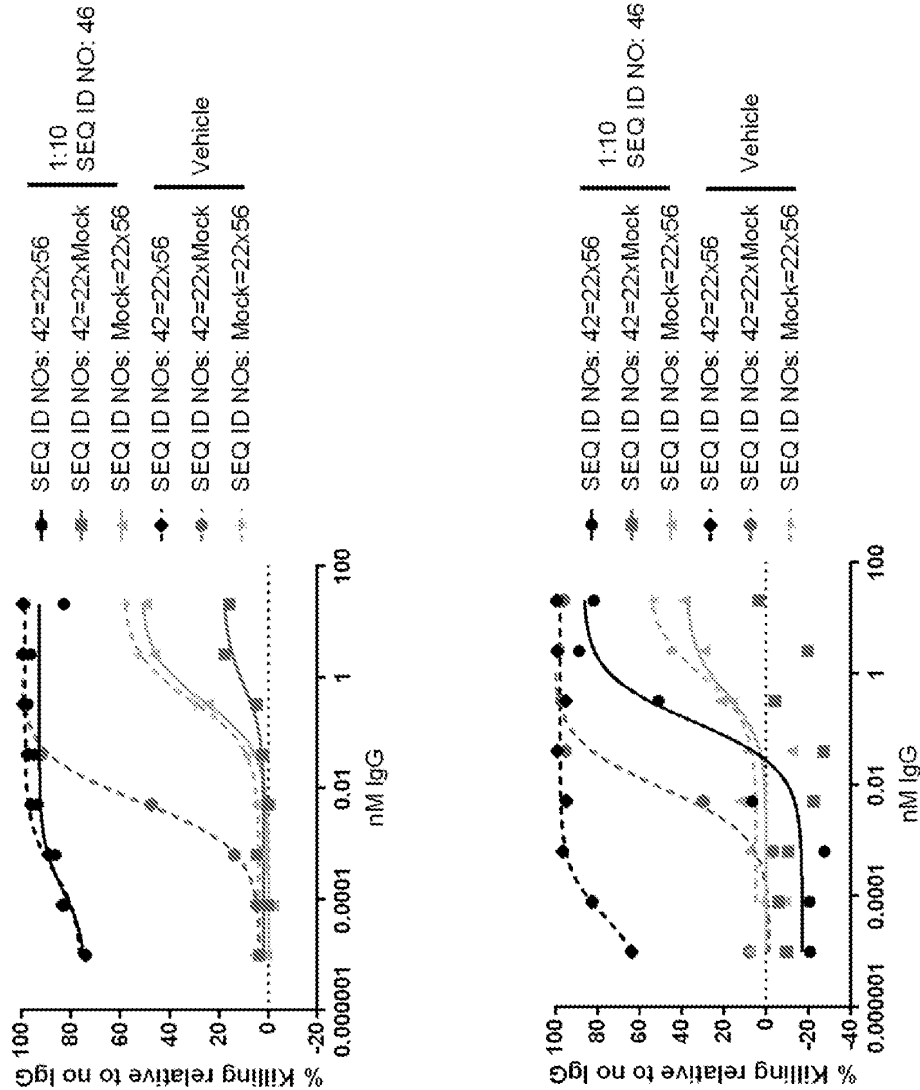


Fig. 7, (3-3)

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Fig. 8A, (1-2)

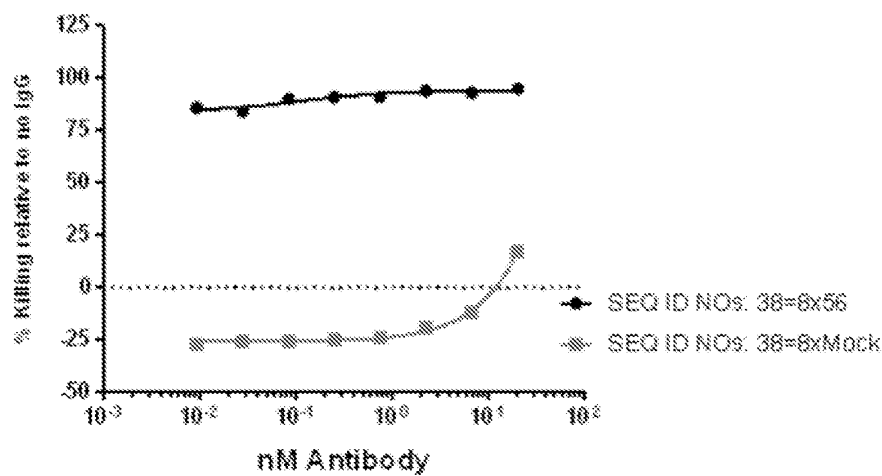
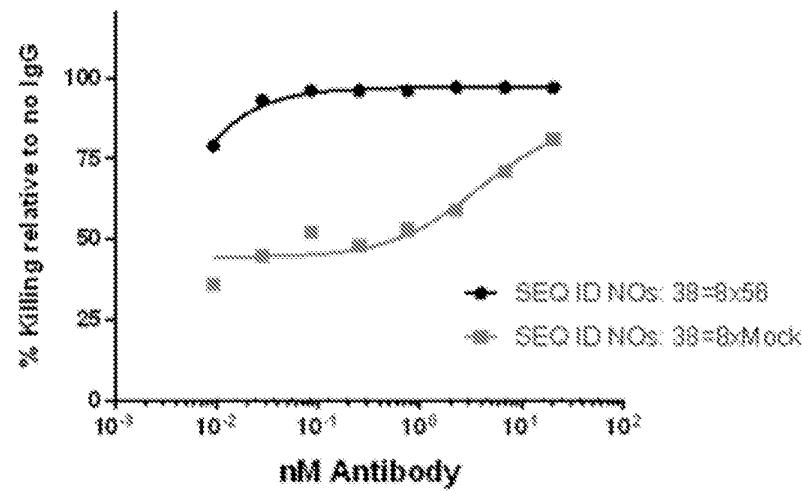
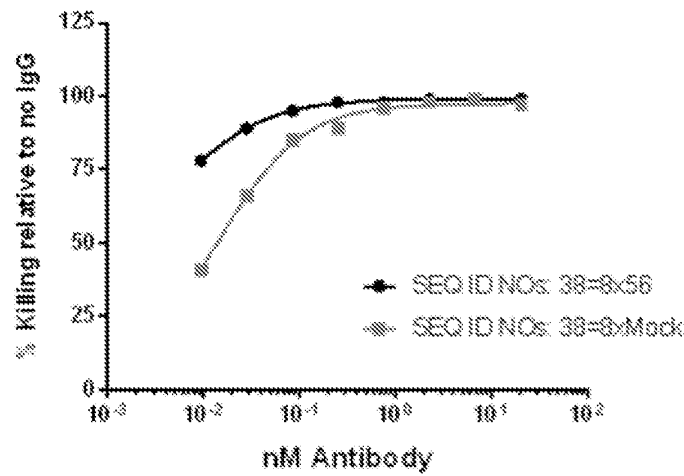


Fig. 8A, (2-2)

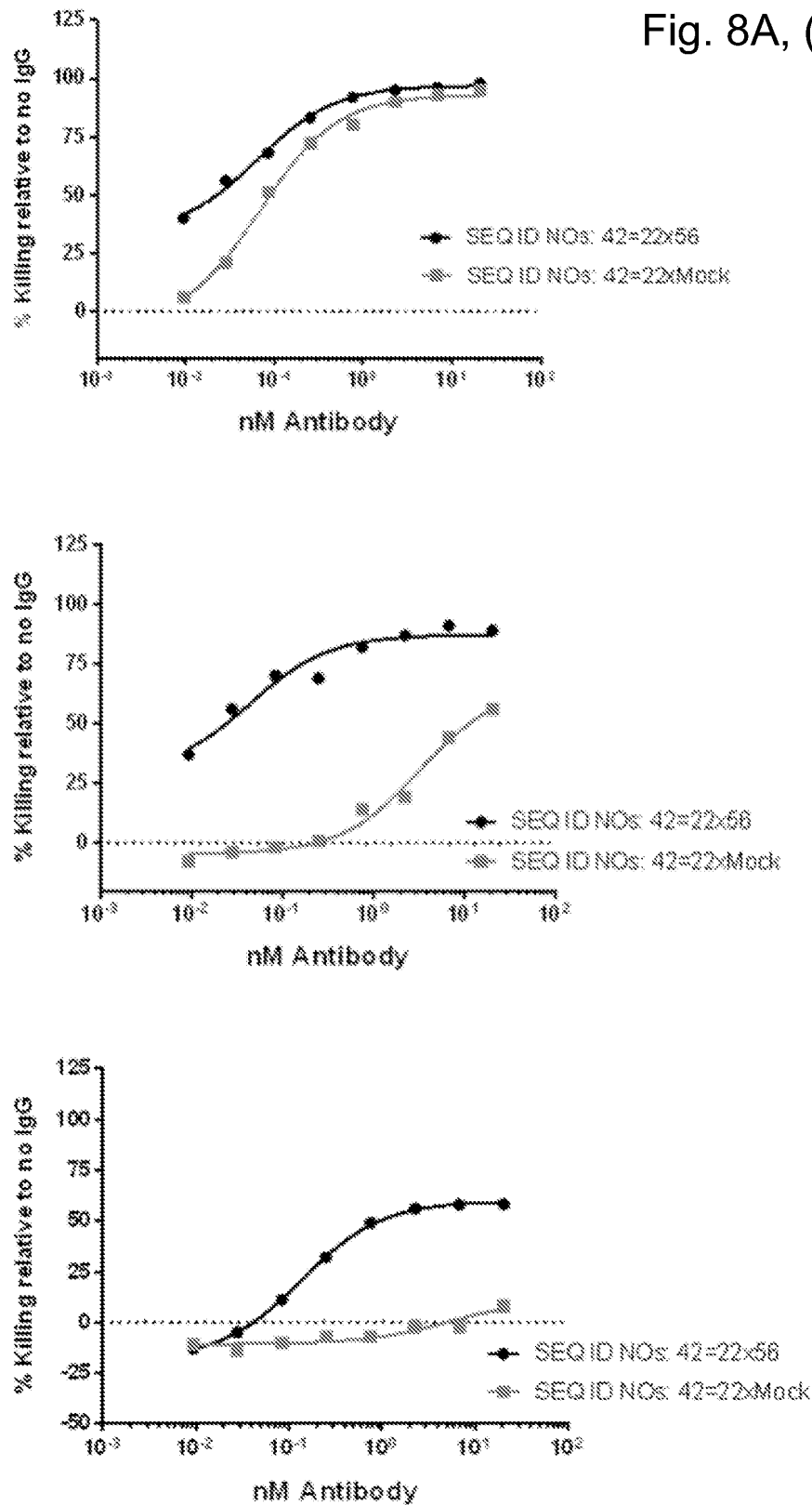


Fig. 8B, (1-2)

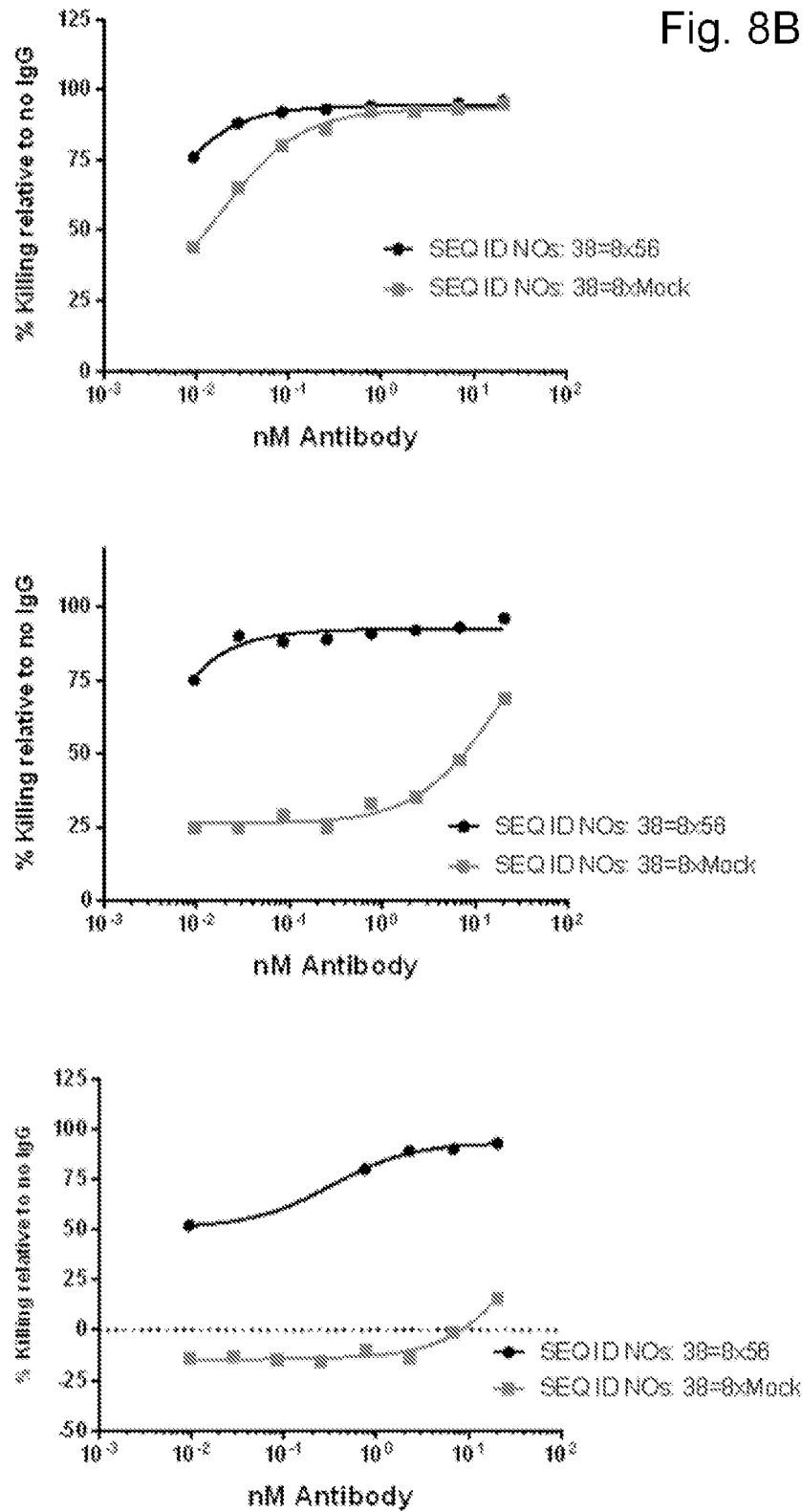


Fig. 8B, (2-2)

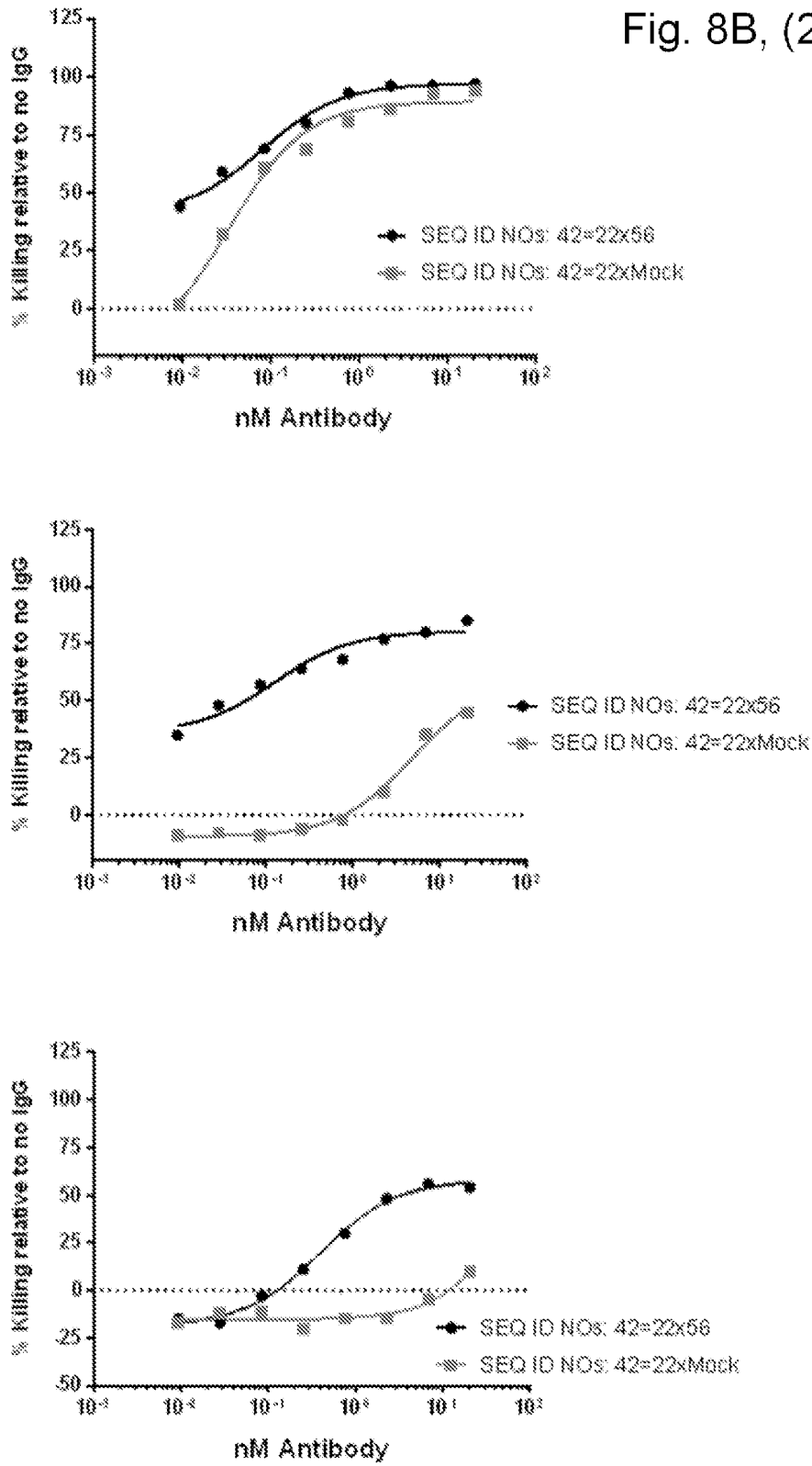
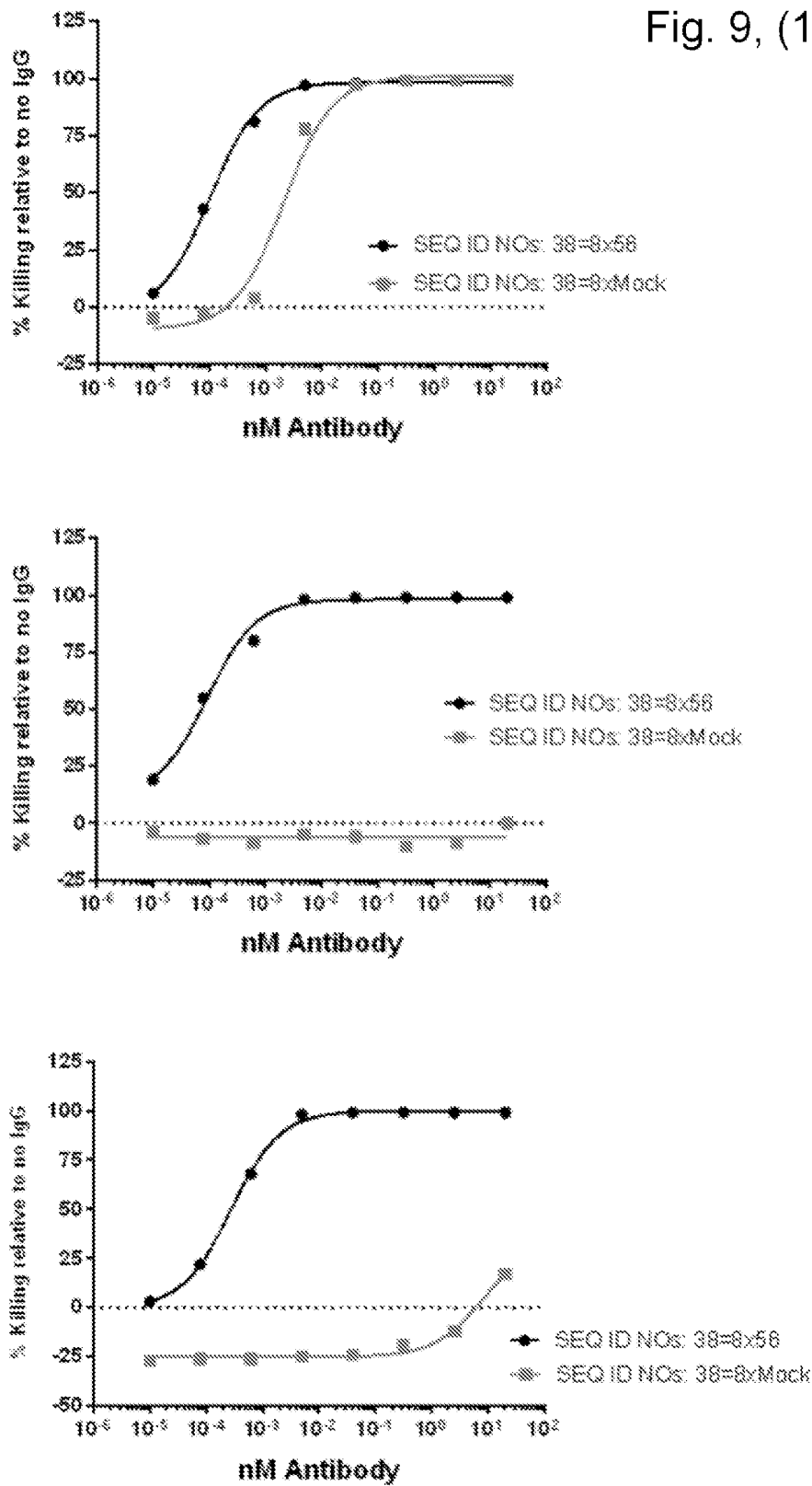


Fig. 9, (1-3)



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Fig. 9, (2-3)

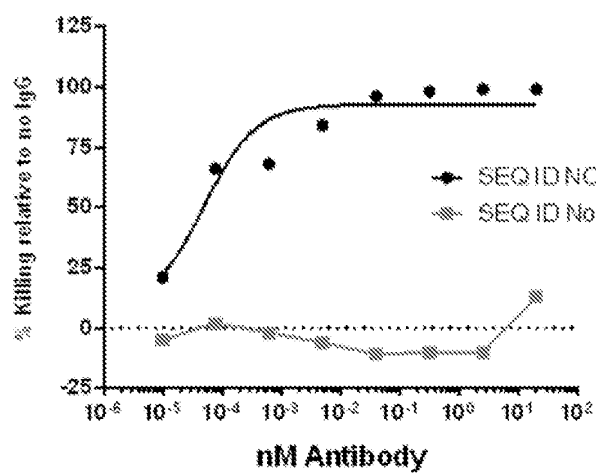
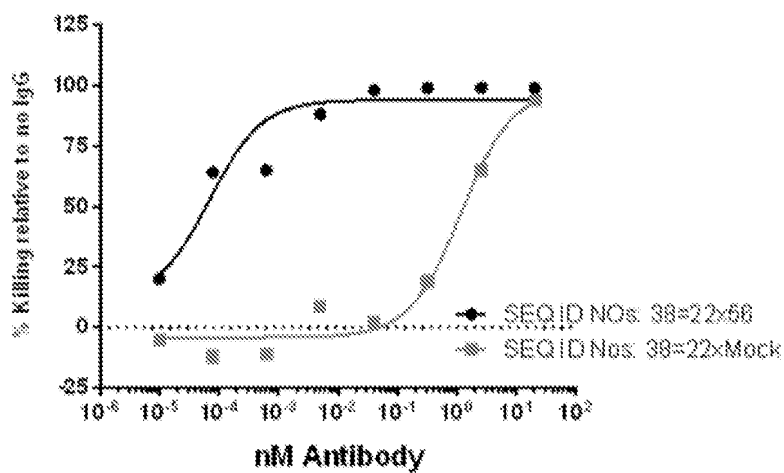
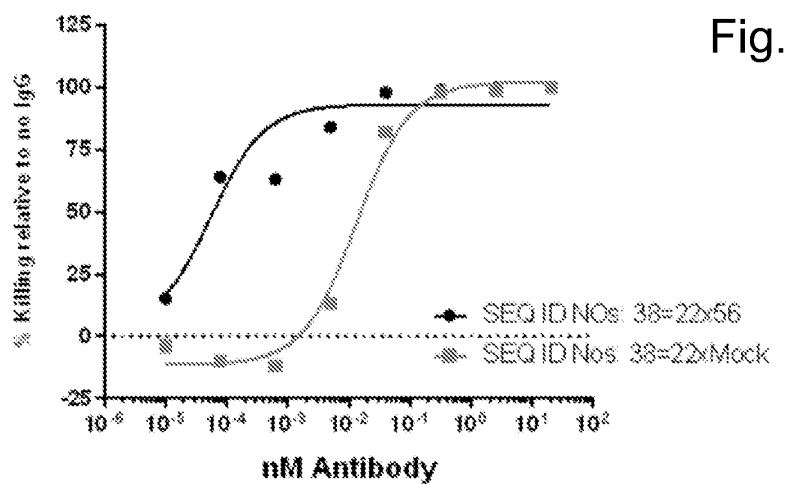
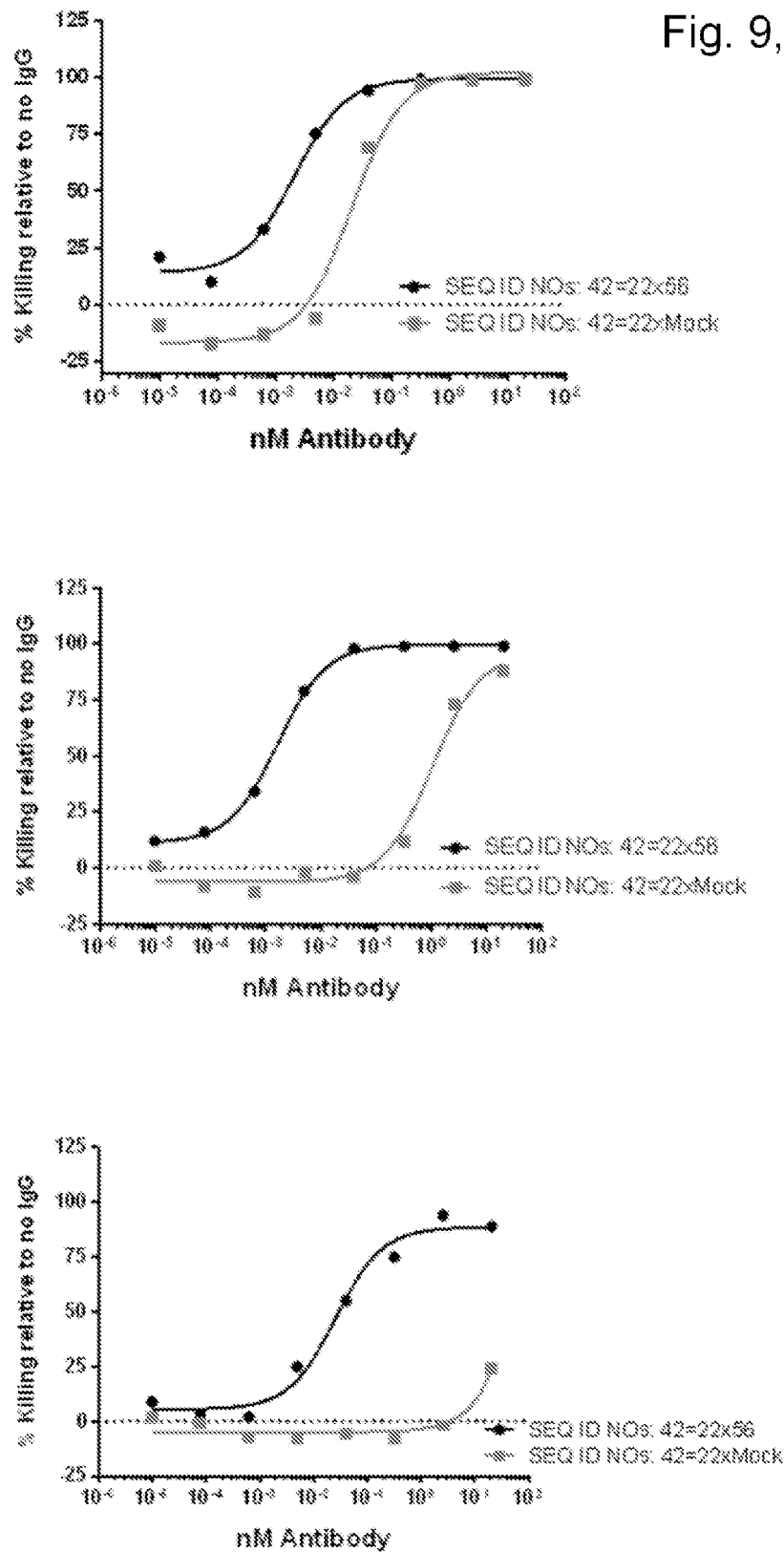


Fig. 9, (3-3)



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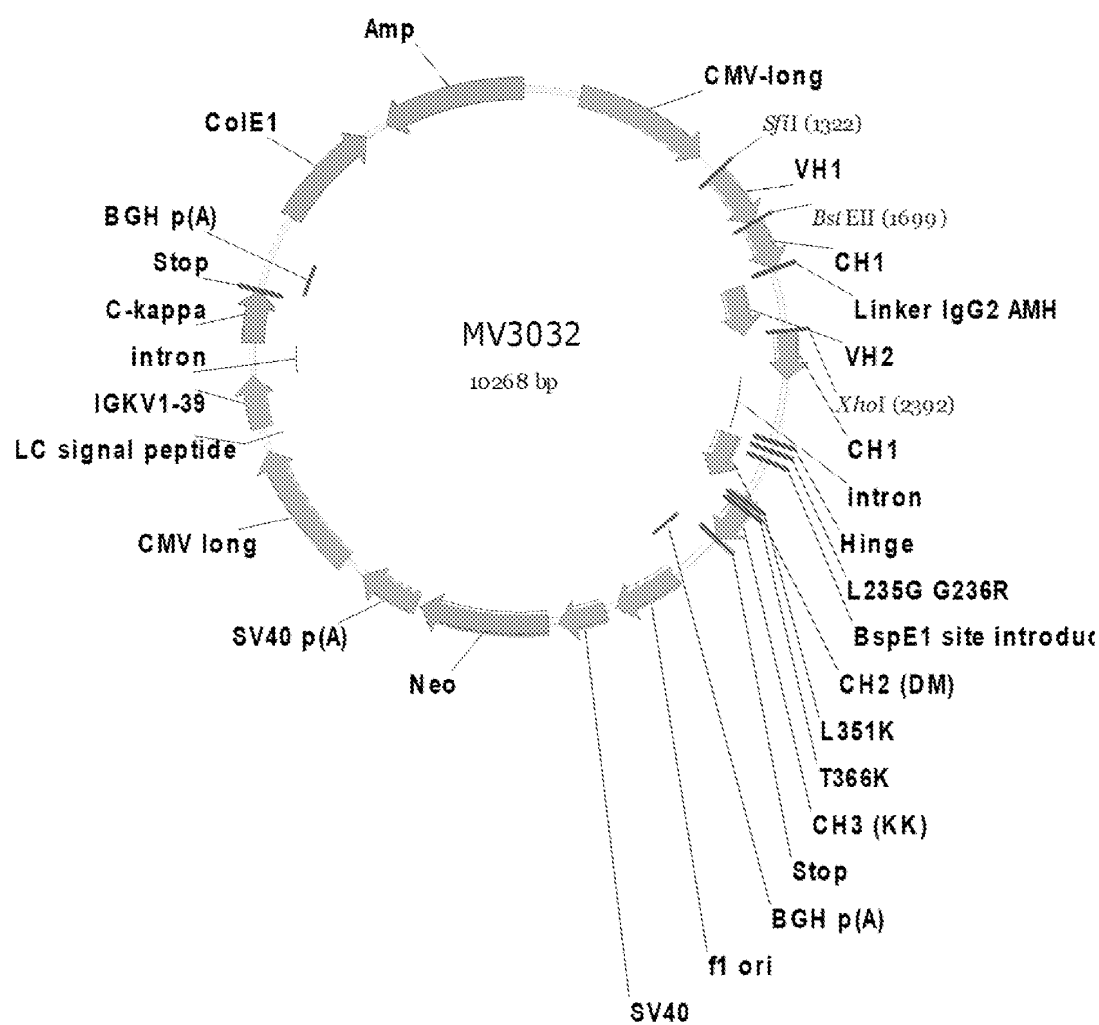


Fig. 10

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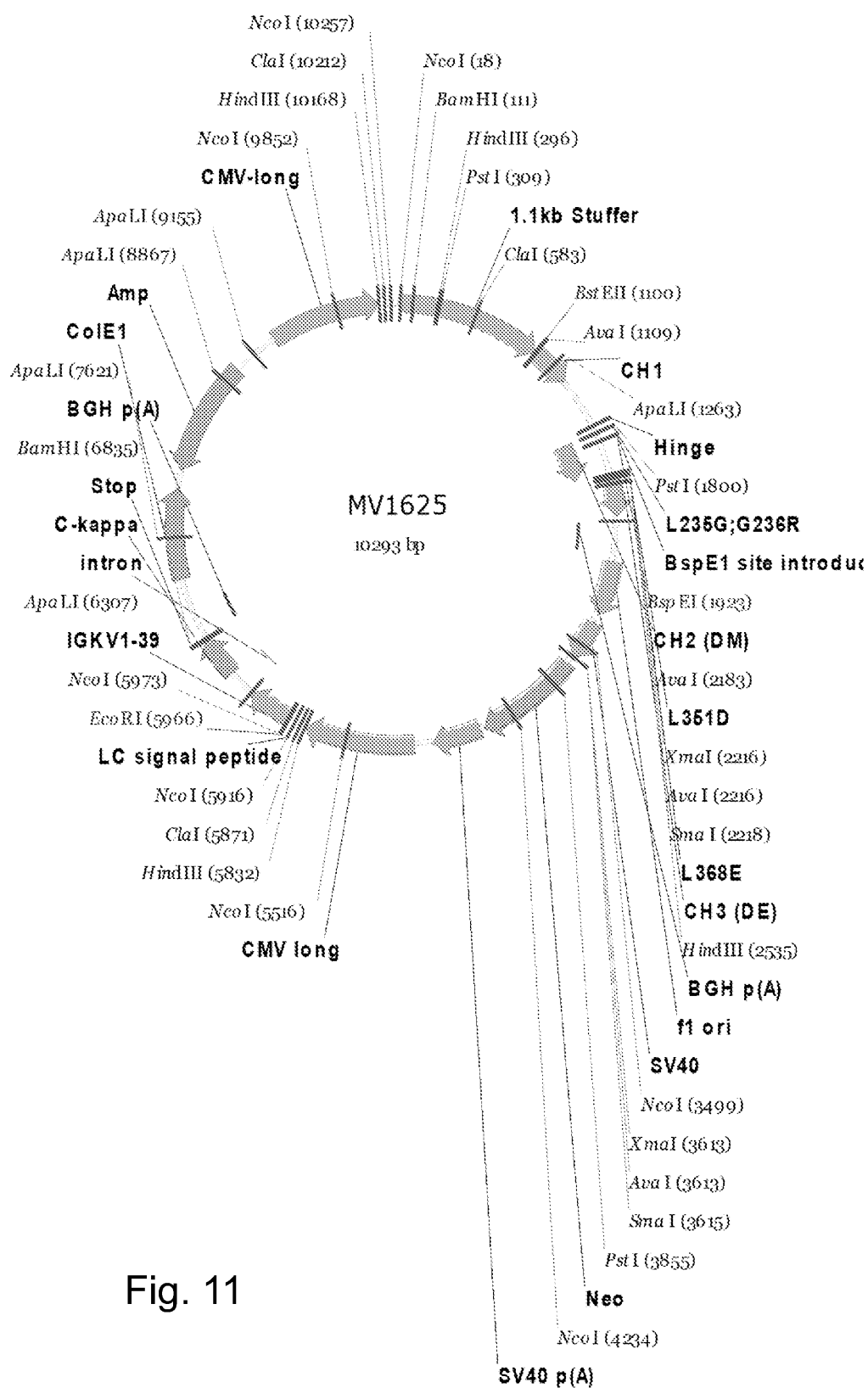


Fig. 11

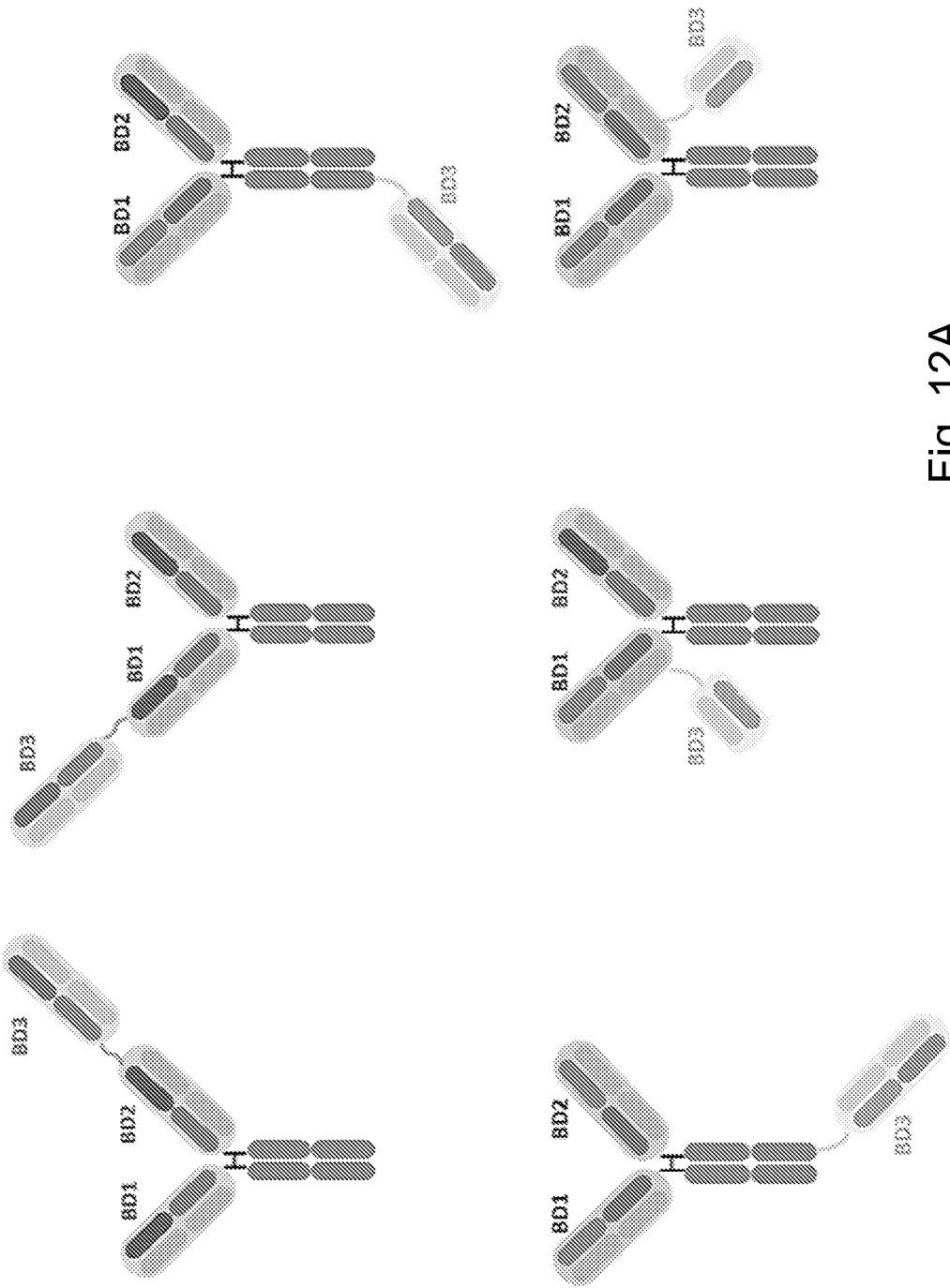


Fig. 12A

Fig. 12B

