Fig. 1A

```
MMRKLAILSVSSFLFVEALFQEYQCY
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NNNNGDNGREGKKDEDKRDGNNEDNEK
LRKPKHKKLKQPADGNPDPNANPVD
PNANPNVDPNNAPNVNPNNAPN
ANPNANPNNAPNVNPNNAPN
PNANPNVDPNNAPNVNPNNAPN
ANPNANPNNAPNVNPNNAPN
PNANPNNAPNVNPNNAPN
ANKNNNQGNGQGHNMPNDPNNRNVDENA
NANNNAVKNNNNEEPSDKHIEQYLKKI
QNSLSTEWSPCSVTCGNGIQVRIKPG
SANKPKDELDYENDIECKKKICMEKCS
SVFNVVNSAIGLIMVLSFLFLN*
```

Fig. 1B

AAGCTTGCCACCATGATGAGGAAACTGGCCATCCTGAGCGTGAGCAGCTTCCTGTTC
GTGGAGGCCCTGTTTCAGGAGTACCAGTGCTACGGCAGCAGCAGCAACACCCGGGTG
CTGAACGAGCTGAACTACGACAACGCCGGCACCAACCTGTACAACGAGCTGGAGATG
AACTACTACGGCAAGCAGGAGAACTGGTACAGCCTGAAGAAGAACAGCCGGTCTCTG
GGCGAGAACGACGACGGCAACAACAACAACGGCGACAACGGCCGGGAGGGCAAGGAC
GAGGACAAGCGGGACGGCAACAACGAGGACAACGAGAAGCTGCGGAAGCCCAAGCAC
AAGAAACTTAAGCAGCCCGCCGACGGCAACCCCGACCCCAACGCCAACCCCAACGTG
GACCCCAACGCCAATCCTAATGTCGACCCCAATGCCAATCCGAACGTTGATCCCAAT
GCGAATCCTAACGCTAACCCCAATGCCAACCCAAATGCCAATCCAAATGCAAATCCC
AACGCCAATCCAAACGCAAACCCTAATGCTAATCCAAACGCTAATCCTAATGCCAAT
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AATCCCAACGCTAACCCGAACGCAAACCCTAACGCCAATCCGAATGCCAACCCAAAC
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AGCGCCAACAAGCCCAAGGACGAGCTGGACTACGAGAATGACATCGAGAAGAAGATC
TGCAAGATGGAGAAGTGCAGCAGCGTGTTCAACGTGGTGAACAGCGCCATCGGCCTG
ATTATGGTGCTGAGCTTCCTGTTCCTGAACTGAAGATCTGCTGATAAGGATCC

Fig. 2A

```
MMRKLAILSVSSFLFVEALFQEYQ
CYGSSSNTRVLNELNYDNAGTNLY
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GENNDDGNNKLRKHKKLKQPAD
GNNEDNNEKLRKLKKLKQPAD
PDPNANPNVDPNNANPNVDPNN
VDPNANPNVDPNNANPNVDPNN
ANPNANPNVDPNNANPNVDPNN
ANPNANPNVDPNNANPNVDPNN
NQGNGQGHNNNNEEPSDKHIKE
NSAVKNNNNEEWSTCGNGIQV
QNSLSTEWSPCSVTCGNGIQV
PGSANKPKDELDYANDIEKKI
EKCSSVFNVVNS*KKICKM
```

Fig. 2B

AAGCTTGCCACCATGATGAGGAAACTGGCCATCCTGAGCGTGAGCAGCTTCCTGT
TCGTGGAGGCCCTGTTTCAGGAGTACCAGTGCTACGGCAGCAGCAGCAACACCCG
GGTGCTGAACGAGCTGAACTACGACAACGCCGGCACCAACCTGTACAACGAGCTG
GAGATGAACTACTACGGCAAGCAGGAGAACTGGTACAGCCTGAAGAAGAACAGCC
GGTCTCTGGGCGAGAACGACGACGGCAACAACAACAACGGCGACAACGGCCGGGA
GGGCAAGGACGAGGACAAGCGGGACGGCAACAACGAGGACAACGAGAAGCTGCGG
AAGCCCAAGCACAAGAAACTTAAGCAGCCCGCCGACGGCAACCCCGACCCCAACG
CCAACCCCAACGTGGACCCCAACGCCAATCCTAATGTCGACCCCAATGCCAATCC
GAACGTTGATCCCAATGCGAATCCTAACGCTAACCCCAATGCCAACCCAAATGCC
AATCCAAATGCAAATCCCAACGCCAATCCAAACGCAAACCCTAATGCTAATCCAA
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TCCGAACGCTAACCCCAACGCAAATCCCAACGCTAACCCGAACGCAAACCCTAAC
GCCAATCCGAATGCCAACCCAAACGCCAACCCGAACGCTAATCCGAATGCTAACC
CGAATGCTAATCCTAACGCAAACCCAAATGCAAACCCCAATGCAAACCCGAACGC
CAATCCCAACGCCAATCCTAATGCCAACAAGAACAATCAGGGCAACGGCCAGGGC
CACAACATGCCCAACGACCCCAACCGGAACGTGGACGAGAACGCCAACGCCAACA
GCGCCGTGAAGAACAACAACAACGAGGAGCCCAGCGACAAGCACATCAAGGAGTA
CCTGAACAAGATCCAGAACAGCCTGAGCACCGAGTGGAGCCCCTGCAGCGTGACC
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Fig. 3A

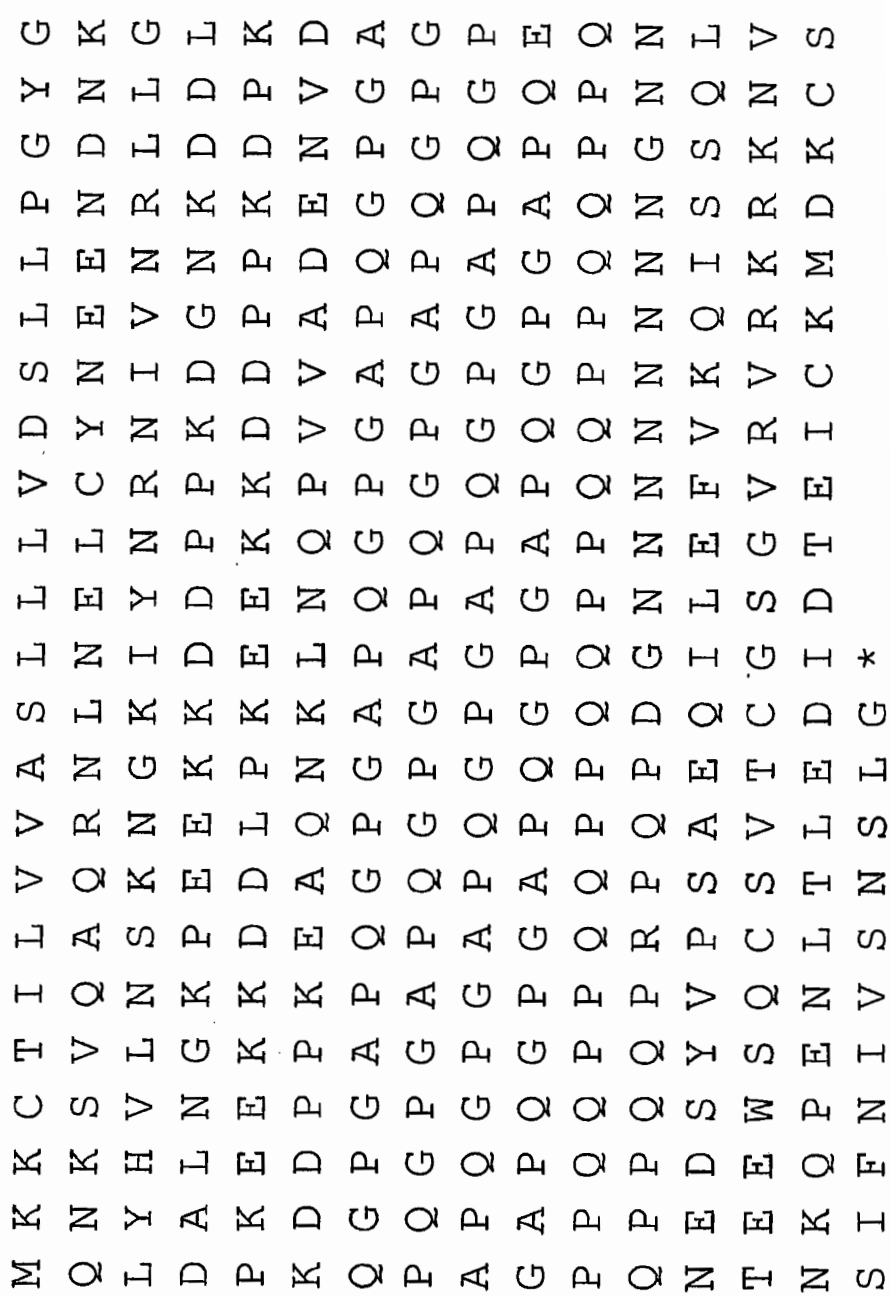

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Q N K S V Q A Q R N L G K I Y N R N I V N E E N D N K
L Y H V L N S K N G K K K N R R L L G
D A L N G K P E E K K K D D P P K E E K K D L P K K
P K E E K K P P K K D D L P K K Q G P G A P P Q G P G A P Q N K K P P G A P Q G P G A P Q G P G A P P Q G P G A P Q G P G A P P Q G P G A P Q G P G A P

Fig. 3B

AAGCTTGCTAGCCACCATGAAGAAGTGCACCATCCTGGTGGTGGCCAGCCTG
CTGCTGGTGGACAGCCTGCTGCCCGGCTACGGCCAGAACAAGAGCGTGCAGG
CCCAGCGGAACCTGAACGAGCTGTGCTACAACGAGGAGAACGACAACAAGCT
GTACCACGTGCTGAACAGCAAGAACGGCAAGATTTACAACCGGAACATCGTG
AACCGGCTGCTGGGCGACGCCCTGAACGGCAAGCCCGAGGAGAAGAAGGACG
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CGATCTGCCTAAGGAGGAAAAAAAGGACGATCCTCCTAAGGACCCCAAGAAG
GACGATCCTCCCAAAGAGGCCCAGAACAAGCTGAACCAGCCCGTGGTGGCCG
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CAGGGACCCGGCGCTCCACAGGGCCCAGGGGCCCCCCAGGGCCCAGGGGCAC
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AACGGCAACAACAACGAGGACAGCTACGTGCCCAGCGCCGAGCAGATCCTGG
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CGTGACCTGCGGCAGCGGCGTGCGGGTGCGGAAGCGGAAGAACGTGAACAAG
CAGCCCGAGAACCTGACCCTGGAGGACATCGACACCGAGATCTGCAAGATGG
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TGCTGATAAGTTTAAACGGATCC

Fig. 4A

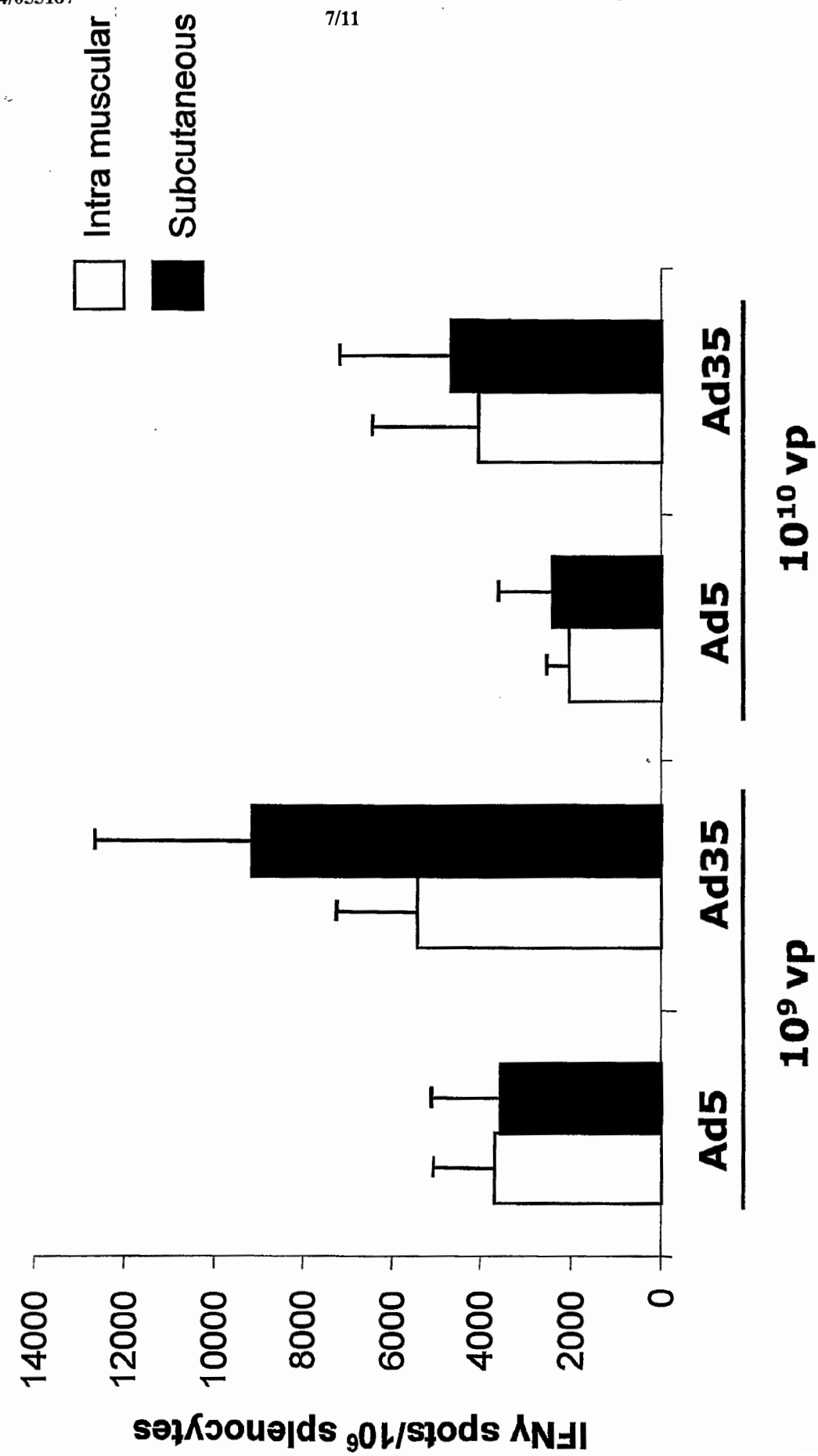

Intra muscular
Subcutaneous
IFNγ spots/10^6 splenocytes
14000
12000
10000
8000
6000
4000
2000
0
Ad5
Ad35
Ad5
Ad35
10^9 vp
10^10 vp

Fig. 4B

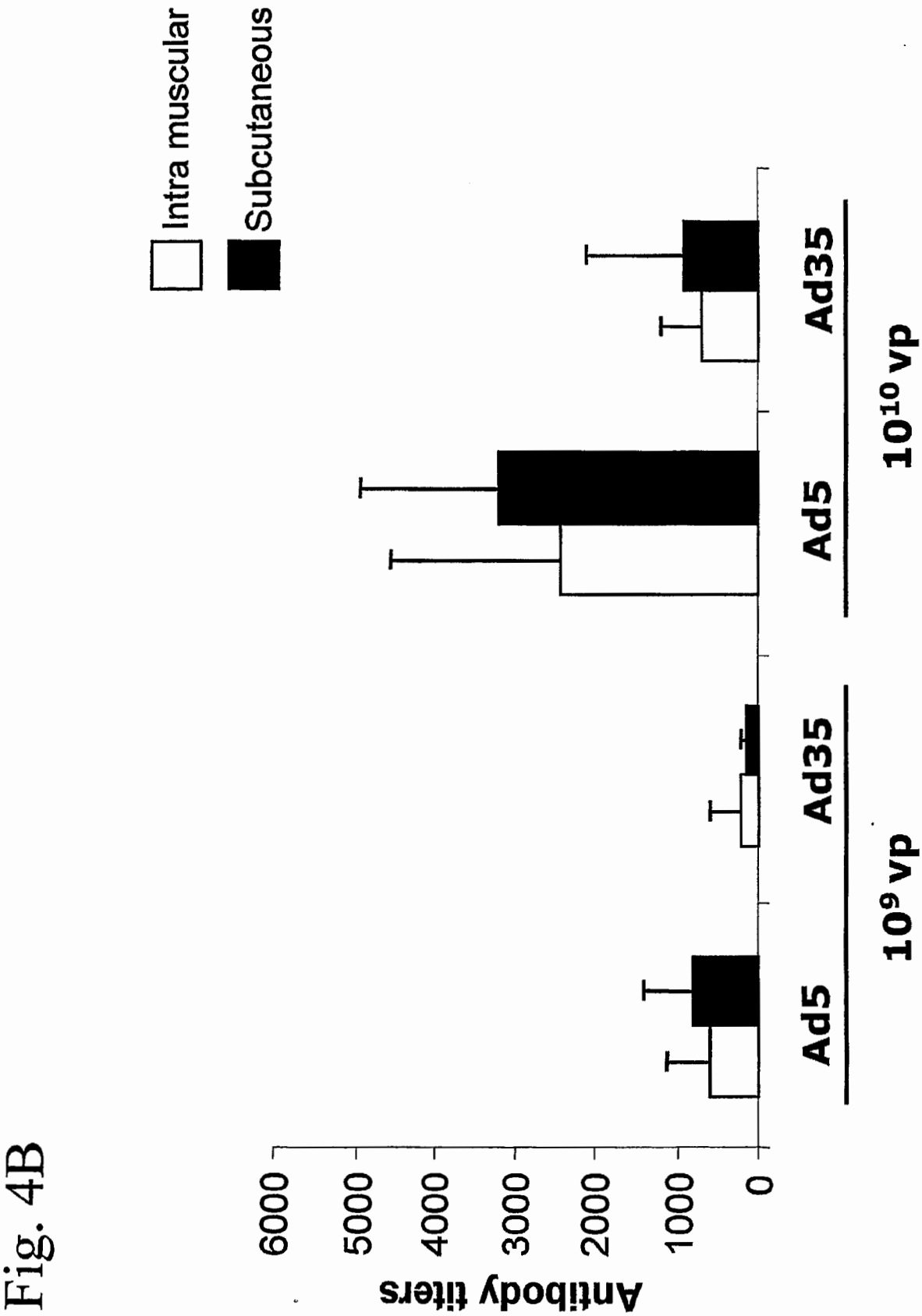

Intra muscular
Subcutaneous
Antibody titers
6000
5000
4000
3000
2000
1000
0
Ad5
Ad35
10^9 vp
Ad5
Ad35
10^{10} vp

Fig. 5A

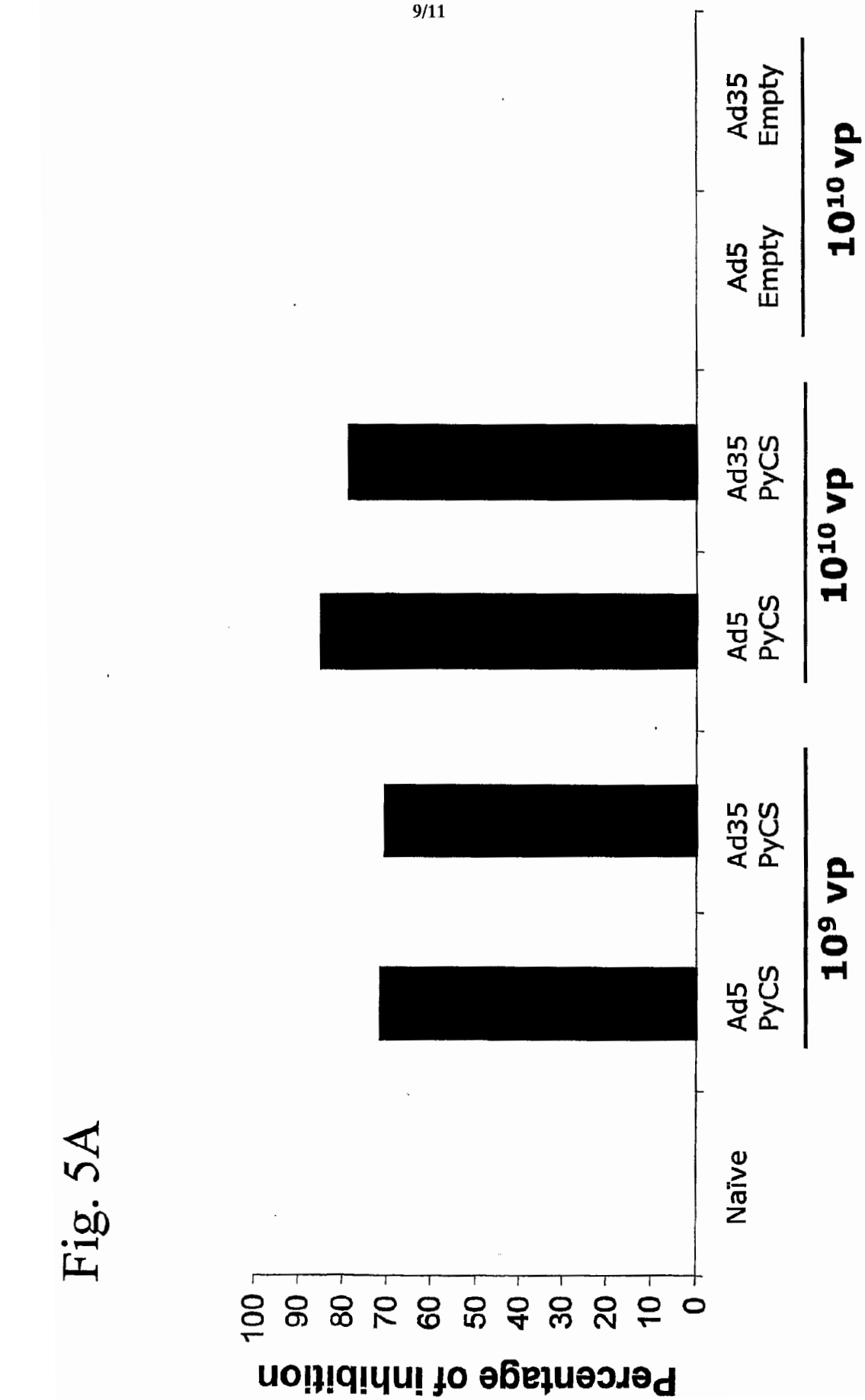

Percentage of inhibition
100
90
80
70
60
50
40
30
20
10
0
Naïve
Ad5 PyCS
Ad35 PyCS
Ad5 PyCS
Ad35 PyCS
Ad5 Empty
Ad35 Empty
10⁹ vp
10¹⁰ vp
10¹⁰ vp

Fig. 5B

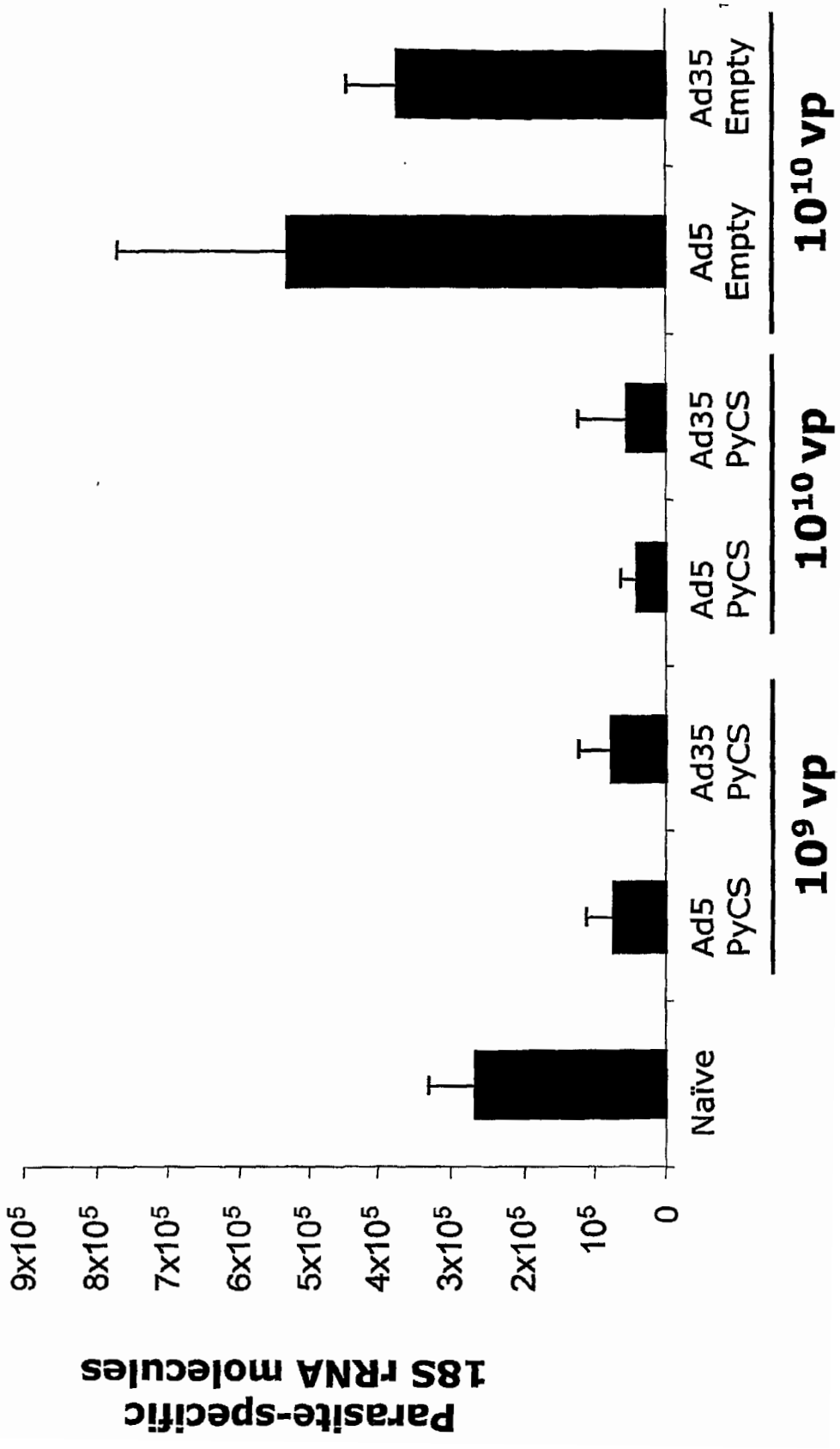
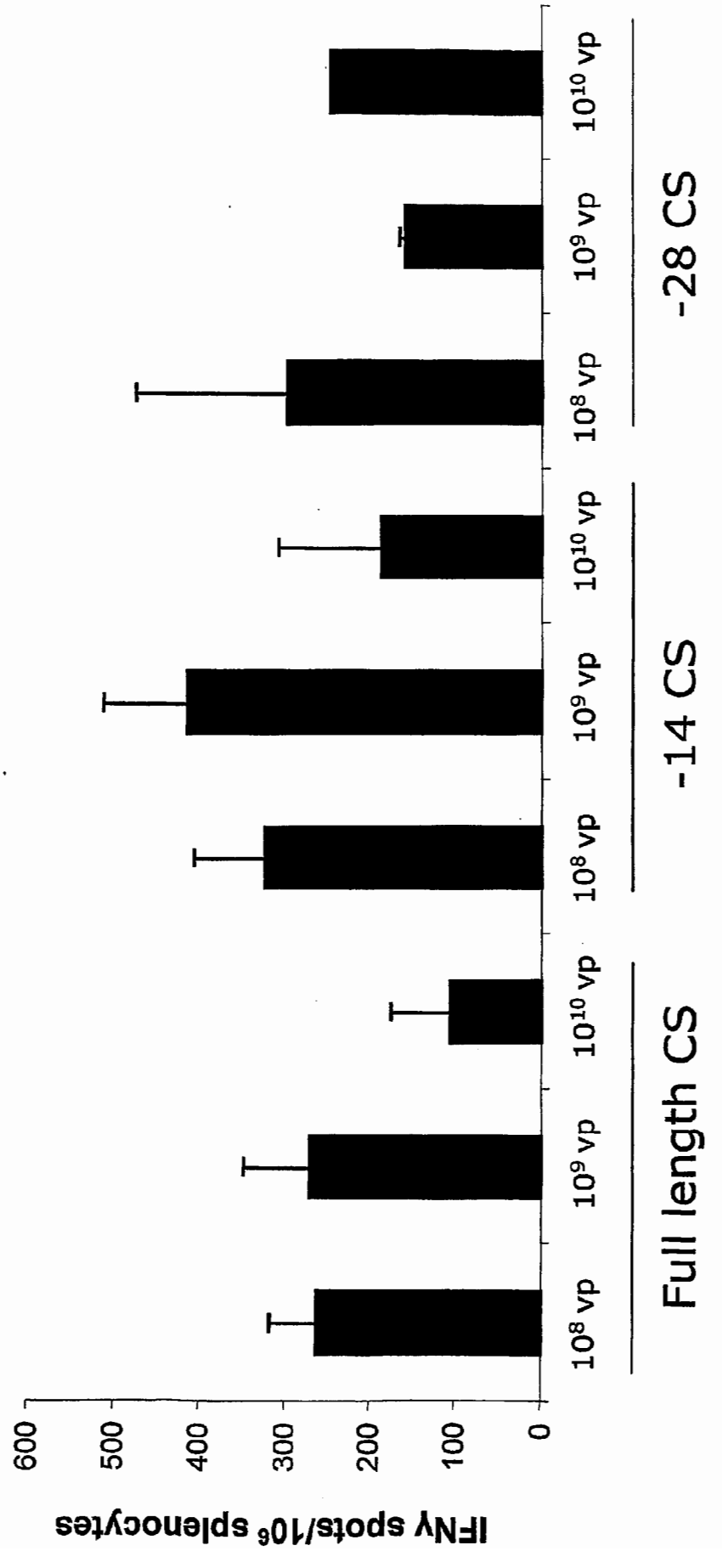

Parasite-specific
18S rRNA molecules
9x10^5
8x10^5
7x10^5
6x10^5
5x10^5
4x10^5
3x10^5
2x10^5
10^5
0
Naïve
Ad5 PyCS
Ad35 PyCS
Ad5 PyCS
Ad35 PyCS
Ad5 Empty
Ad35 Empty
10^9 vp
10^10 vp
10^10 vp

Fig. 6


IFNγ spots/10^6 splenocytes
0
100
200
300
400
500
600
10^8 vp
10^9 vp
10^10 vp
10^8 vp
10^9 vp
10^10 vp
10^8 vp
10^9 vp
10^10 vp
Full length CS
-14 CS
-28 CS