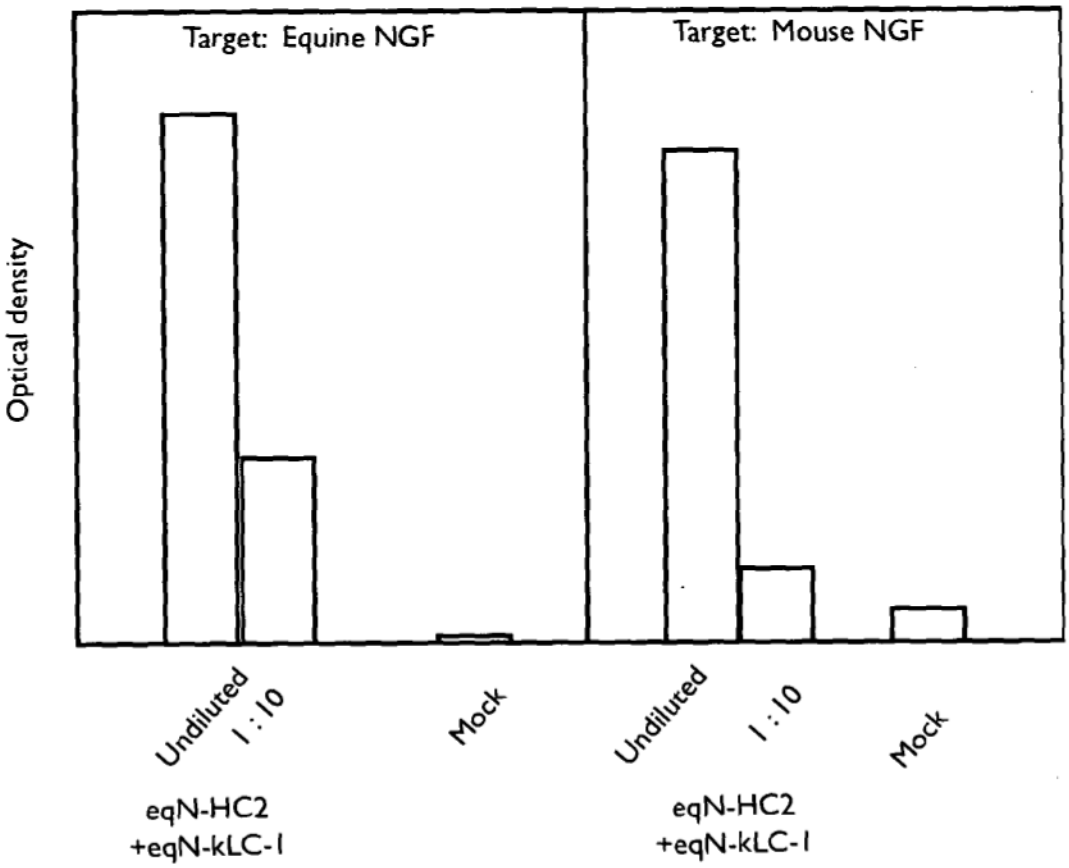

Target: Equine NGF
Target: Mouse NGF
Optical density
Undiluted
1 : 10
Mock
Undiluted
1 : 10
Mock
eqN-HC2
+eqN-kLC-1
eqN-HC2
+eqN-kLC-1

Figure 1

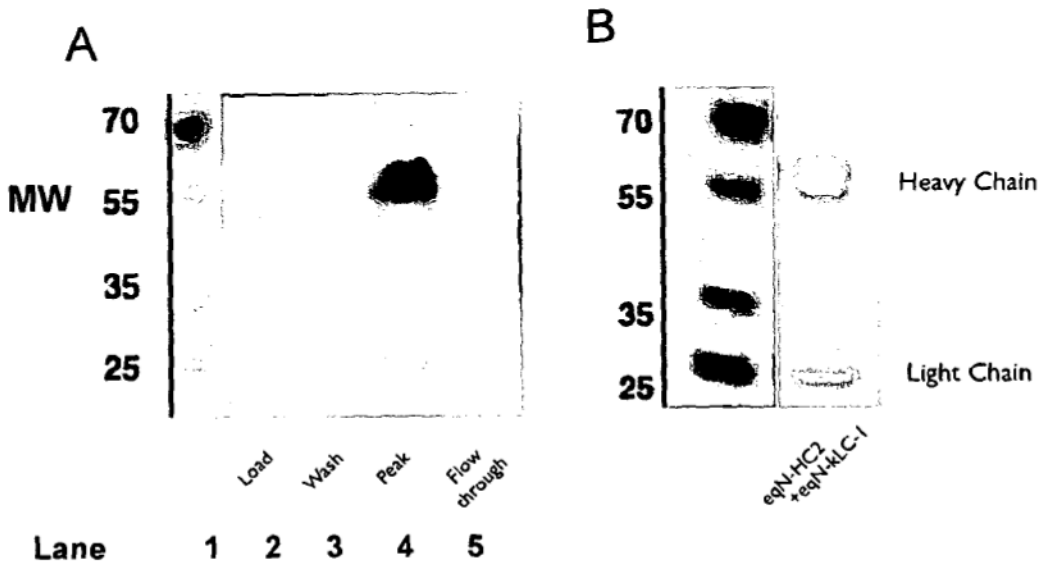

A
70
MW 55
35
25
Load
Wash
Peak
Flow through
Lane 1 2 3 4 5
B
70
55
35
25
Heavy Chain
Light Chain
eqN-HC2 +eqN-kLC-1

Figure 2

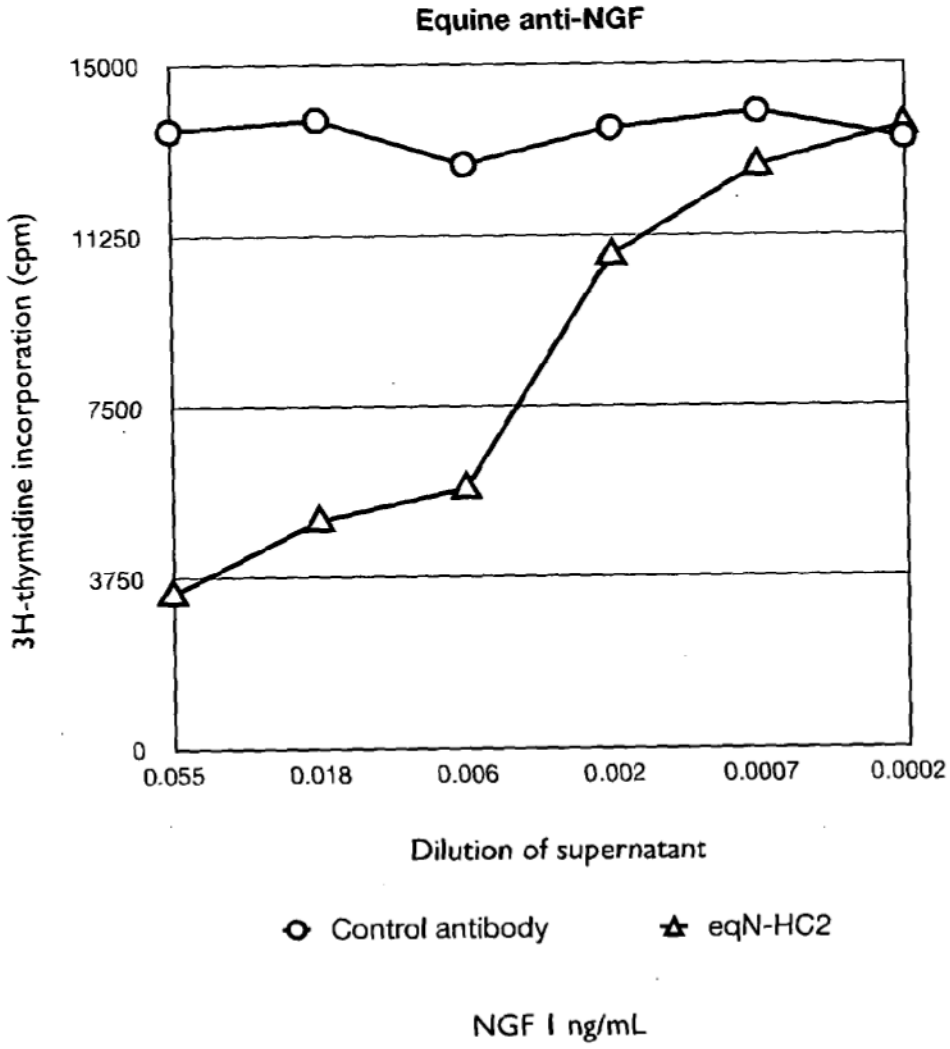

Equine anti-NGF
15000
11250
7500
3750
0
3H-thymidine incorporation (cpm)
0.055
0.018
0.006
0.002
0.0007
0.0002
Dilution of supernatant
Control antibody
eqN-HC2
NGF I ng/mL

Figure 3

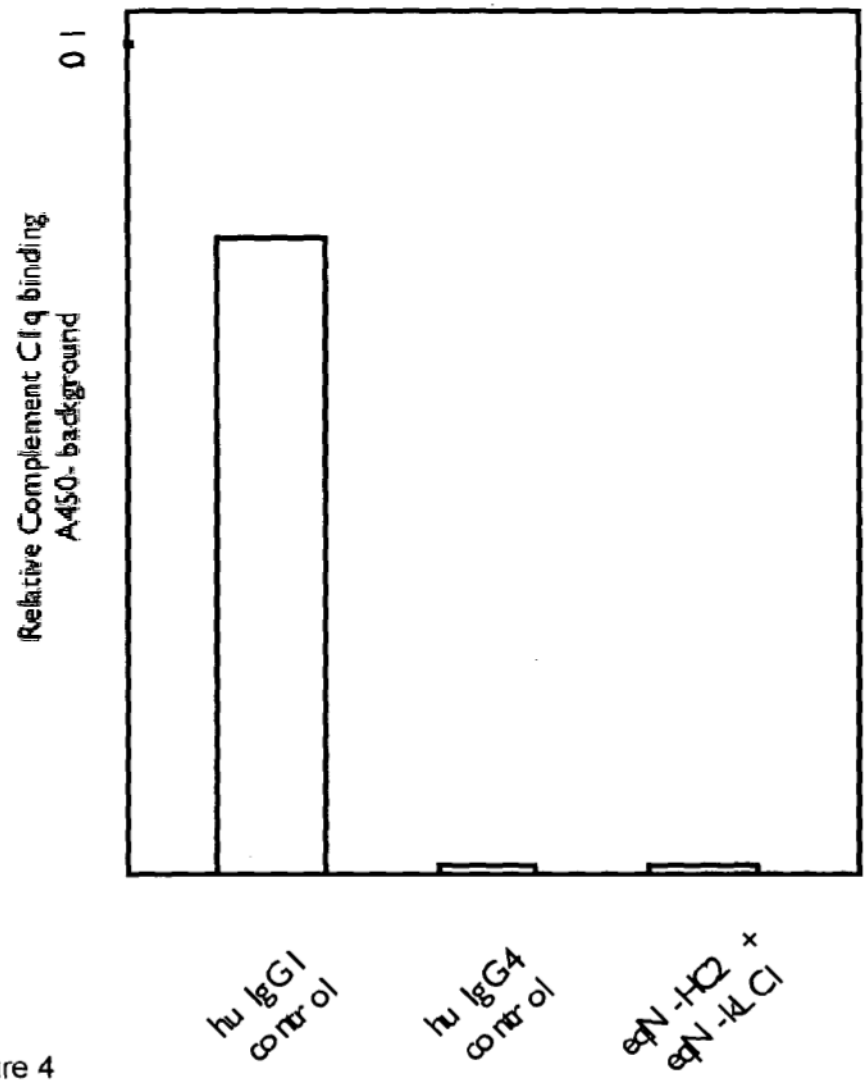

Relative Complement C1q binding
A450- background
0 1
hu IgG1 control
hu IgG4 control
eqN-HC2 + eqN-kL C1

Figure 4

```
  *       *       * **    *
DIVMTQSPASLSASLGETVTIECRASEDIYNALAWYQQKP

 **                                    *    *    *
GQSPKLLIYNTDTLHTGVPSRFSGSGSGTDYSLTINSLQS

  * *                             * *
EDVASYFCQHYFHYPRTFGQGTKLELK
```

Figure 5 – Light chain variable domain

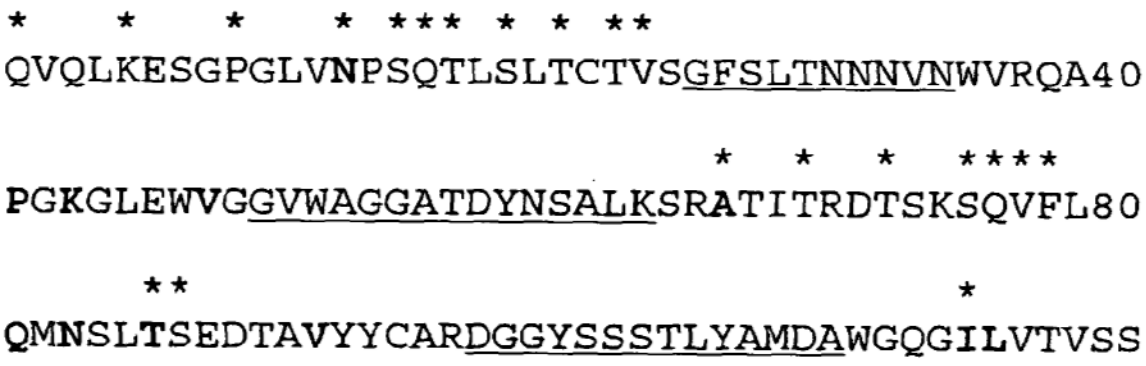


Figure 6 – Heavy chain variable domain

DIVMTQSPASLSASLGETVTIECRASEDIYNALAWYQQKPGQS
PKLLIYNTDTLHTGVPSRFSGSGSGTDYSLTINSLQSEDVASYF
CQHYFHYPRTFGQGTKLELKRDDAKPSAFIFPPSSEELSSGSA
SVVCLVYGFYPSGATINWKVDGLAKTSSFHSSLTEQDSKDNTYS
LSSTLTLPKADYEAHNVYACEVSHKTLSSPLVKSFKRQDC

Figure 7 –Equinised anti-NGF VL kappa light chain

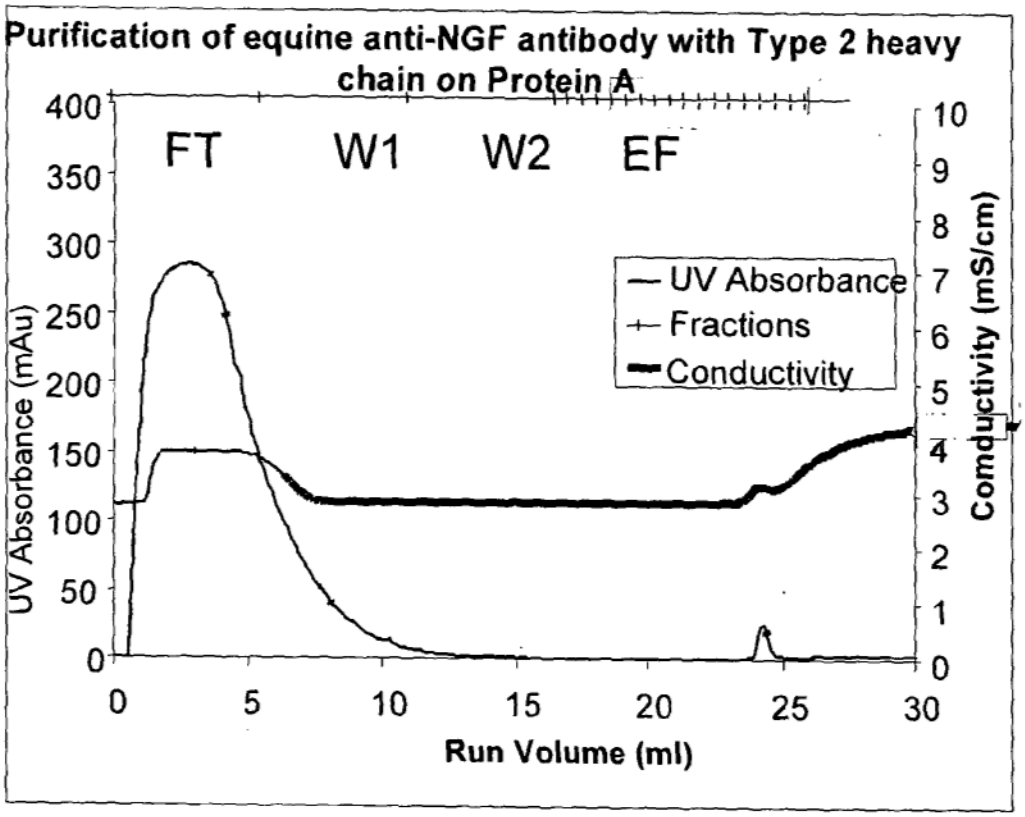
QVQLKESGPGLVNPSQTLSLTCTVSGFSLTNNNVNWVRQAPGKG
LEWVGGVWAGGATDYNSALKSRATITRDTSKSQVFLQMNSLTSE
DTAVYYCARDGGYSSSTLYAMDAWGQGILVTVSSASTTAPKYFQL
TPSCGITSDATVALGCLVSDYYPEPVTVSWNSGALTSGVHTFPSVL
QSSGLYALSSMVTVPASTWTSETYICNVAHPASSTKVDKRIPPCVL
SAEGVIPIPSVPKPQCPPYTHSKFLGGPSVFIFPPNPKDALMISRTPV
VTCVVVNLSDQYPDVQFSWYVDNTEVHSAITKQREAQFNSTYRVV
SVLPIQHQDWLSGKEFKCSVTNVGVPQPISRAISRGKGPSRVPQVY
VLPPHPDELAKSKVSVTCLVKDFYPPDISVEWQSNRWPELEGKYST
TPAQLDGDGSYFLYSKLSLETSRWQQVESFTCAVMHEALHNHFTK
TDISESLGK

Figure 8 – Equinised anti-NGF VH HC2 IgG heavy chain

QVQLKESGPGLVNPSQTLSLTCTVSGFSLTNNNVNWVRQAPGKG
LEWVGGVWAGGATDYNSALKSRATITRDTSKSQVFLQMNSLTSE
DTAVYYCARDGGYSSSTLYAMDAWGQGILVTVSSASTTAPKVFQL
ASHSAGTSDSTVALGCLVSSYFPEPVTVSWNSGALTSGVHTFPSV
RQSSGLYSLSSMVTVPASSLKSQTYICNVAHPASSTKVDKRIVIKEP
CCCPKCPGRPSVFIFPPNPKDTLMISRTPEVTCVVVDVSQENPDVK
FNWYVDGVEAHTATTKAKEKQDNSTYRVVSVLPIQHQDWRRGKEF
KCKVNNRALPAPVERTITKAKGELQDPKVYILAPHREEVTKNTVSVT
CLVKDFYPPDINVEWQSNEEPEPEVKYSTTPAQLDGDGSYFLYSKL
TVETDRWEQGESFTCVVMHEAIRHTYRQKSITNFPGK

Figure 9 – Equinised anti-NGF VH HC6 IgG heavy chain

A


Purification of equine anti-NGF antibody with Type 2 heavy chain on Protein A
FT
W1
W2
EF
UV Absorbance
Fractions
Conductivity
UV Absorbance (mAu)
Comductivity (mS/cm)
Run Volume (ml)
0
50
100
150
200
250
300
350
400
0
1
2
3
4
5
6
7
8
9
10
0
5
10
15
20
25
30

B

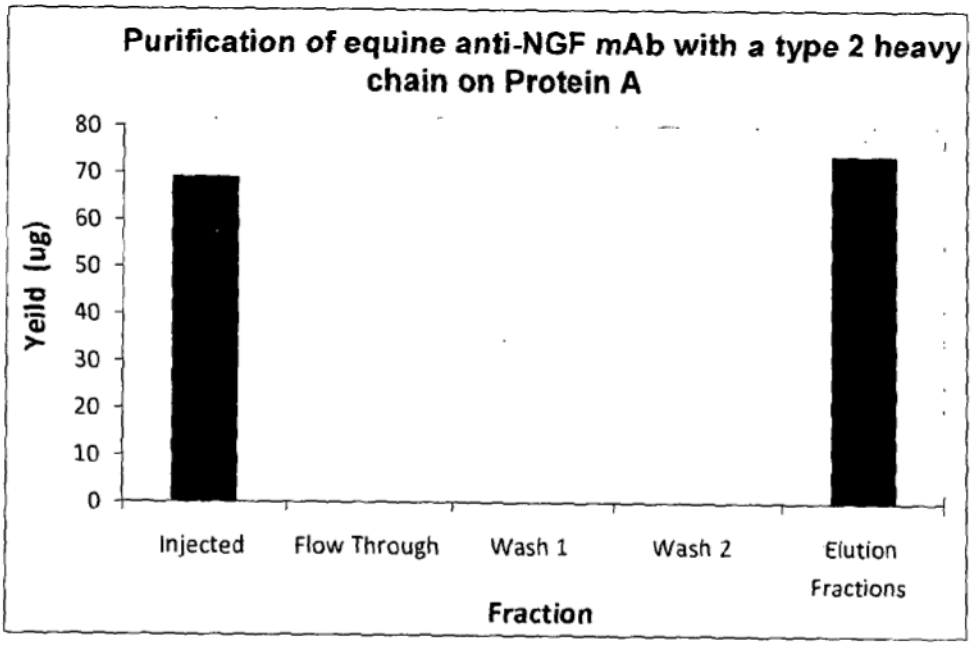
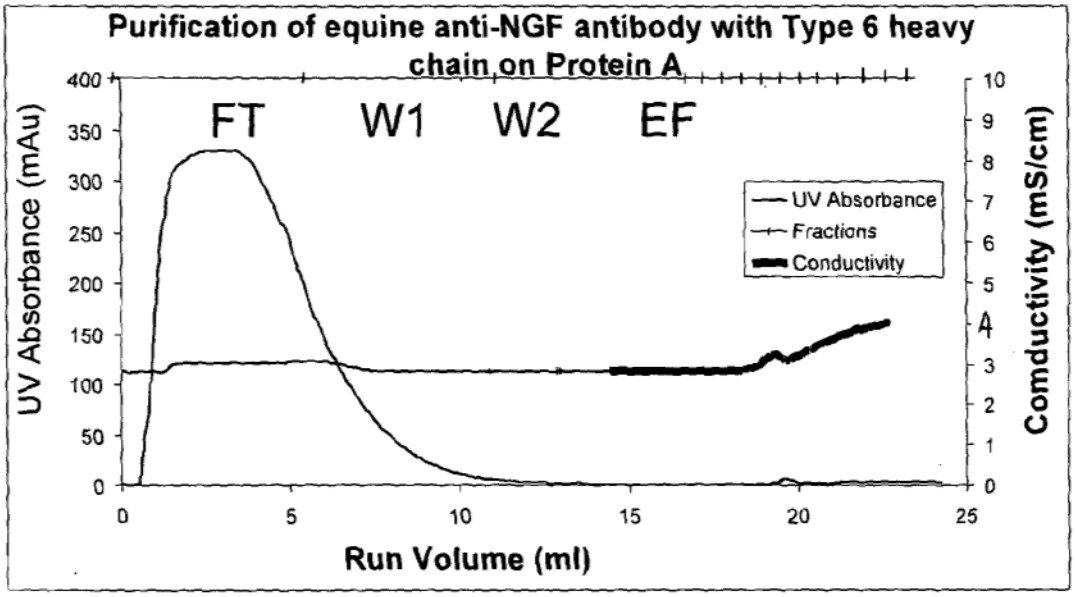

Purification of equine anti-NGF mAb with a type 2 heavy chain on Protein A
Yeild (ug)
0
10
20
30
40
50
60
70
80
Injected
Flow Through
Wash 1
Wash 2
Elution Fractions
Fraction

Figure 10

C


Purification of equine anti-NGF antibody with Type 6 heavy chain on Protein A
FT
W1
W2
EF
UV Absorbance
Fractions
Conductivity
UV Absorbance (mAu)
Comductivity (mS/cm)
Run Volume (ml)
0
50
100
150
200
250
300
350
400
0
1
2
3
4
5
6
7
8
9
10
0
5
10
15
20
25

D

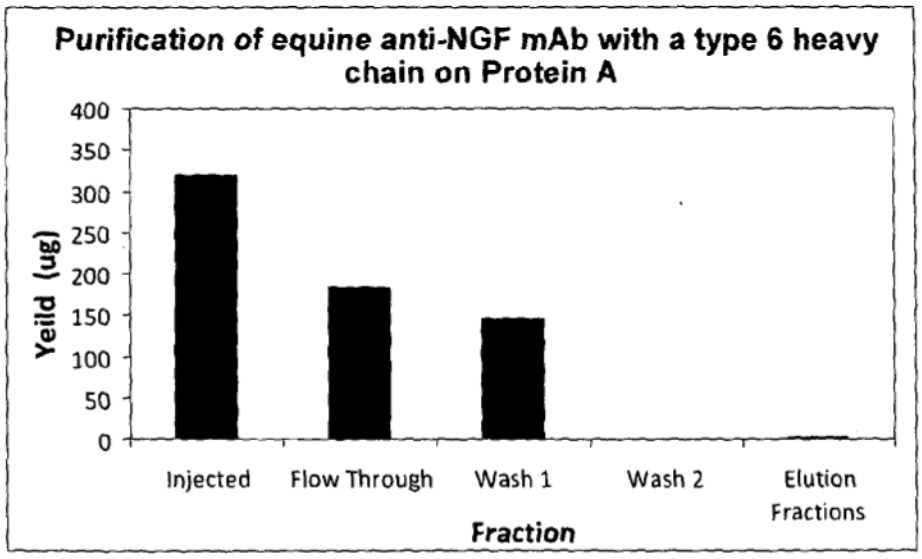

Purification of equine anti-NGF mAb with a type 6 heavy chain on Protein A
Yeild (ug)
0
50
100
150
200
250
300
350
400
Injected
Flow Through
Wash 1
Wash 2
Elution Fractions
Fraction

Figure 10

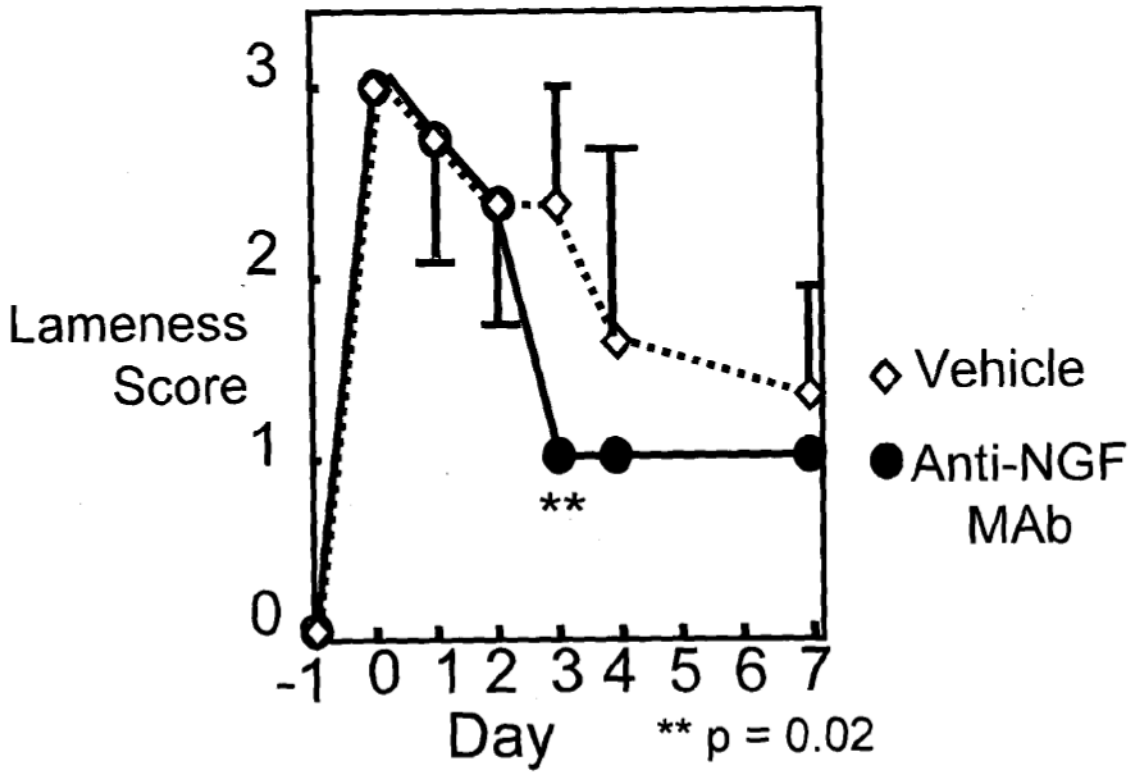

3
2
1
0
Lameness Score
-1 0 1 2 3 4 5 6 7
Day
**
** p = 0.02
Vehicle
Anti-NGF MAb

Figure 11