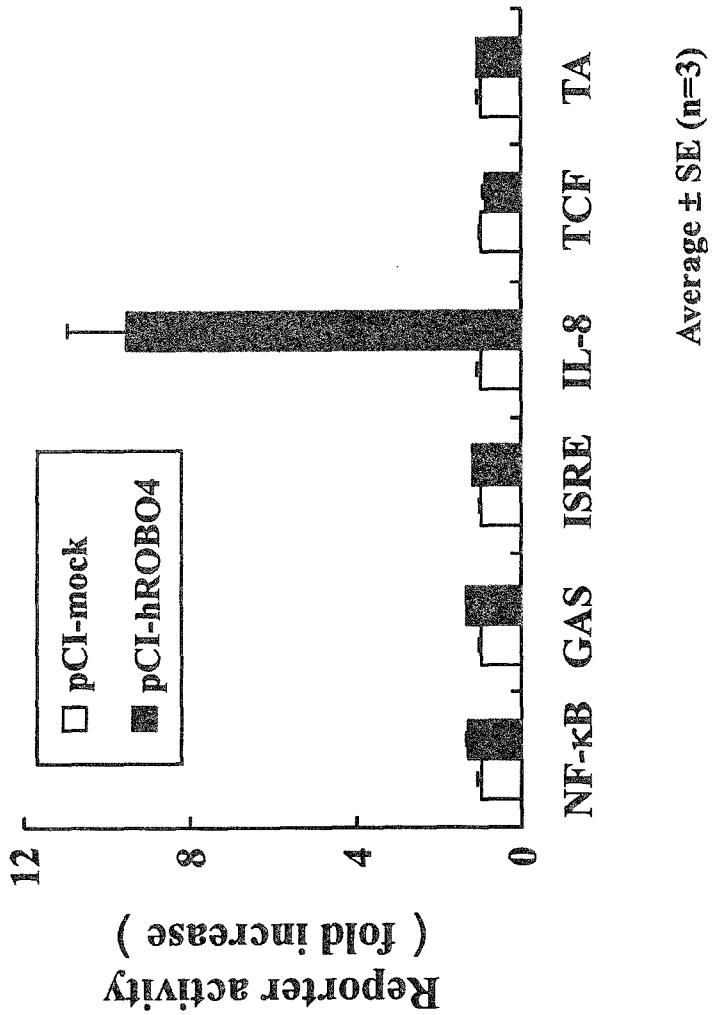
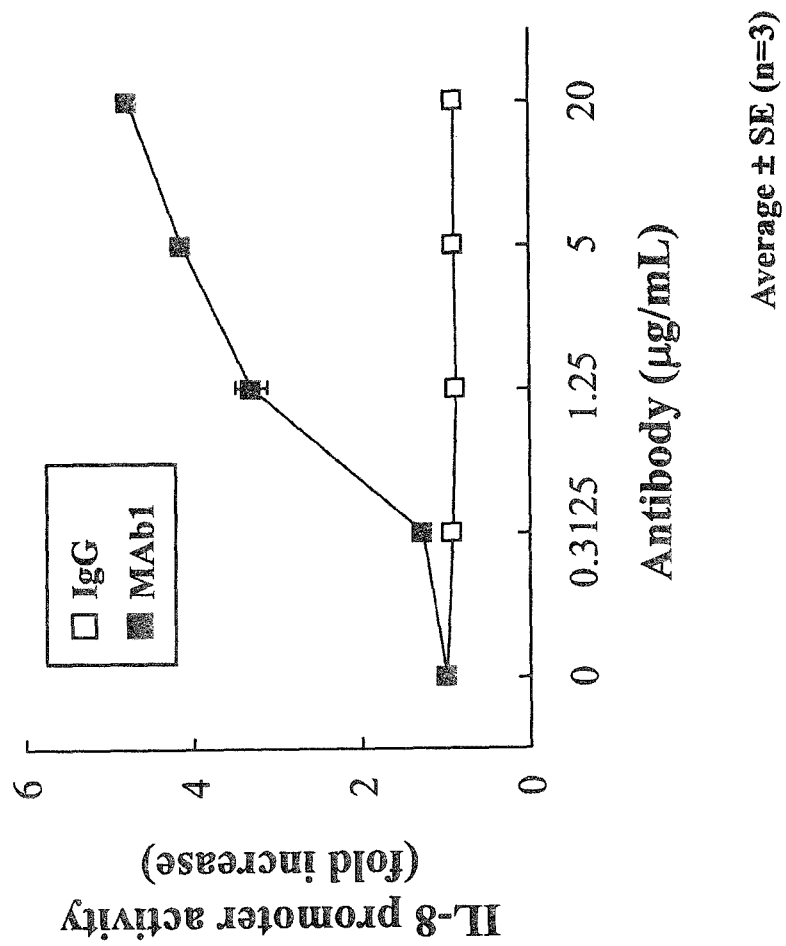
[Figure 1] Reporter activity



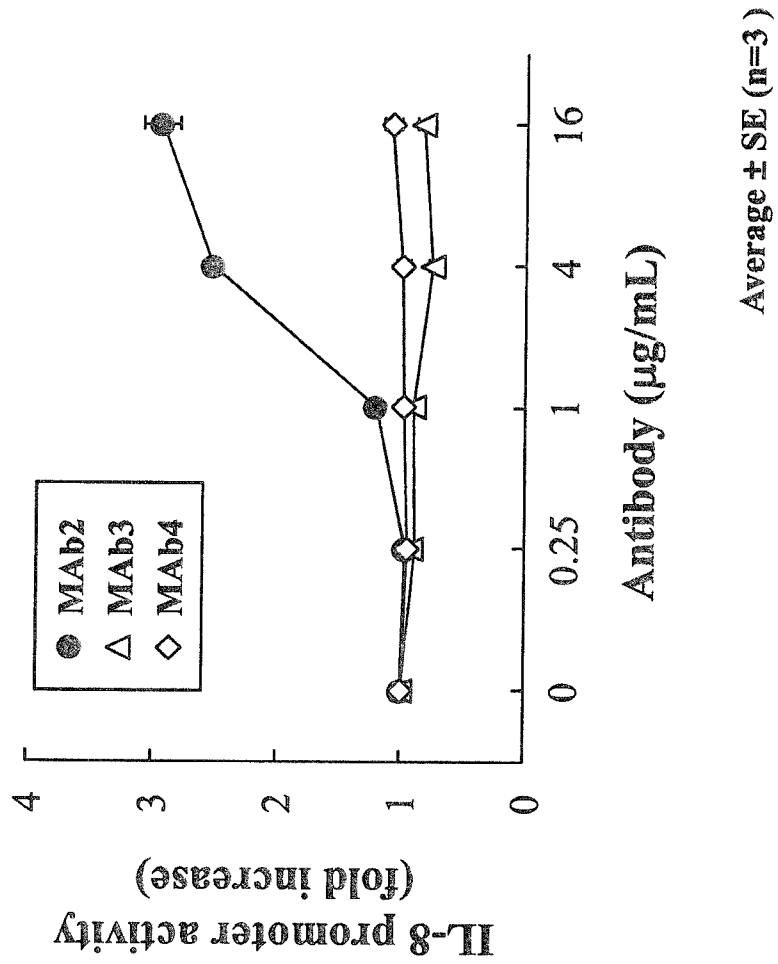
[Figure 2] IL-8 promoter activity



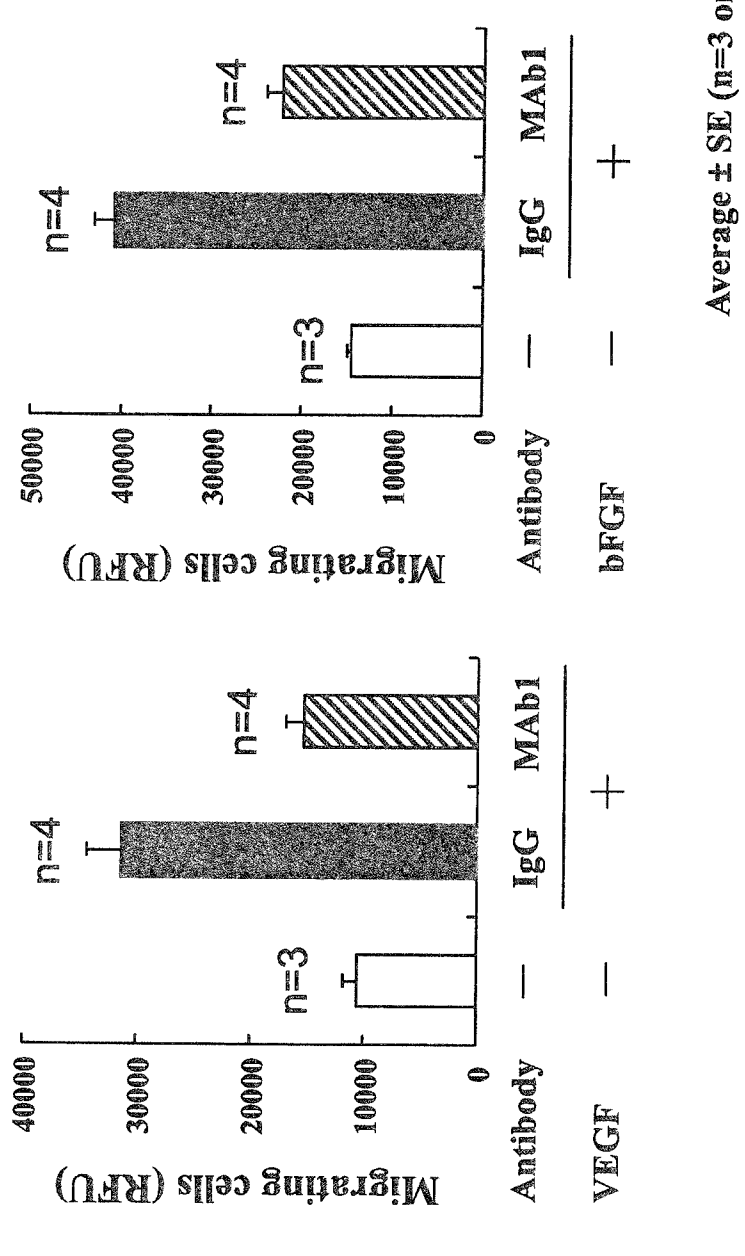
[Figure 3] IL-8 promoter activity



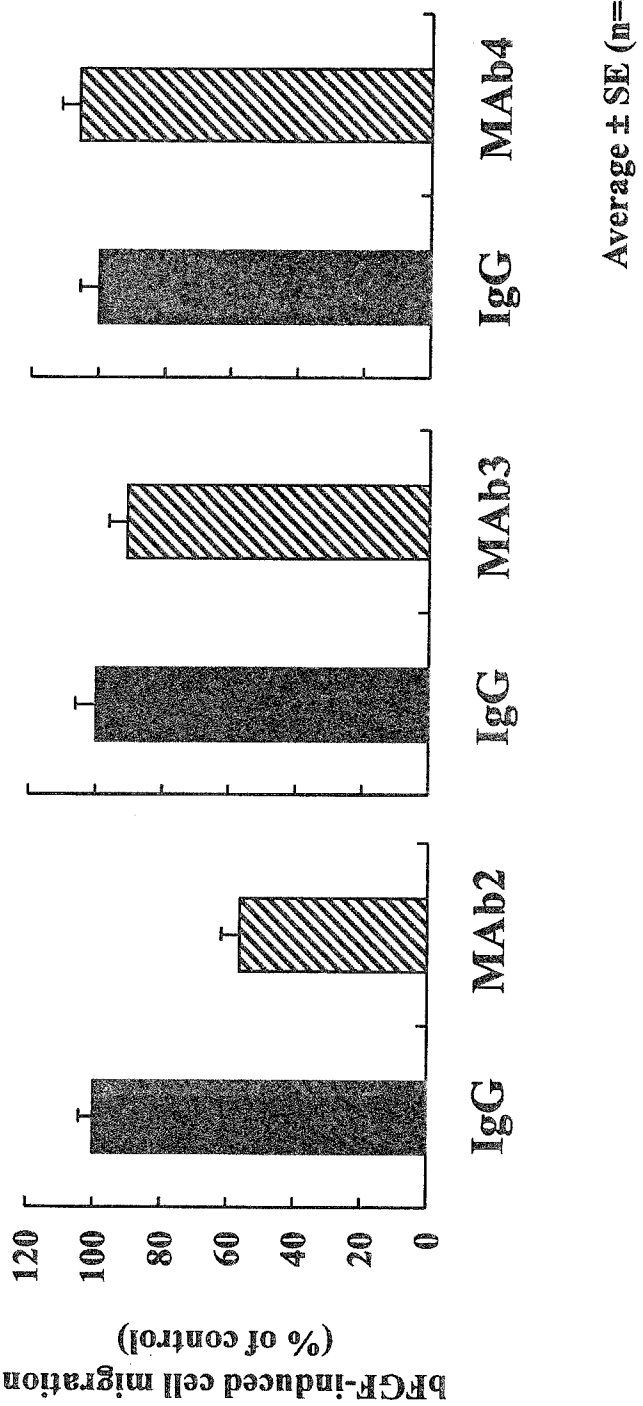
[Figure 4] IL-8 promoter activity



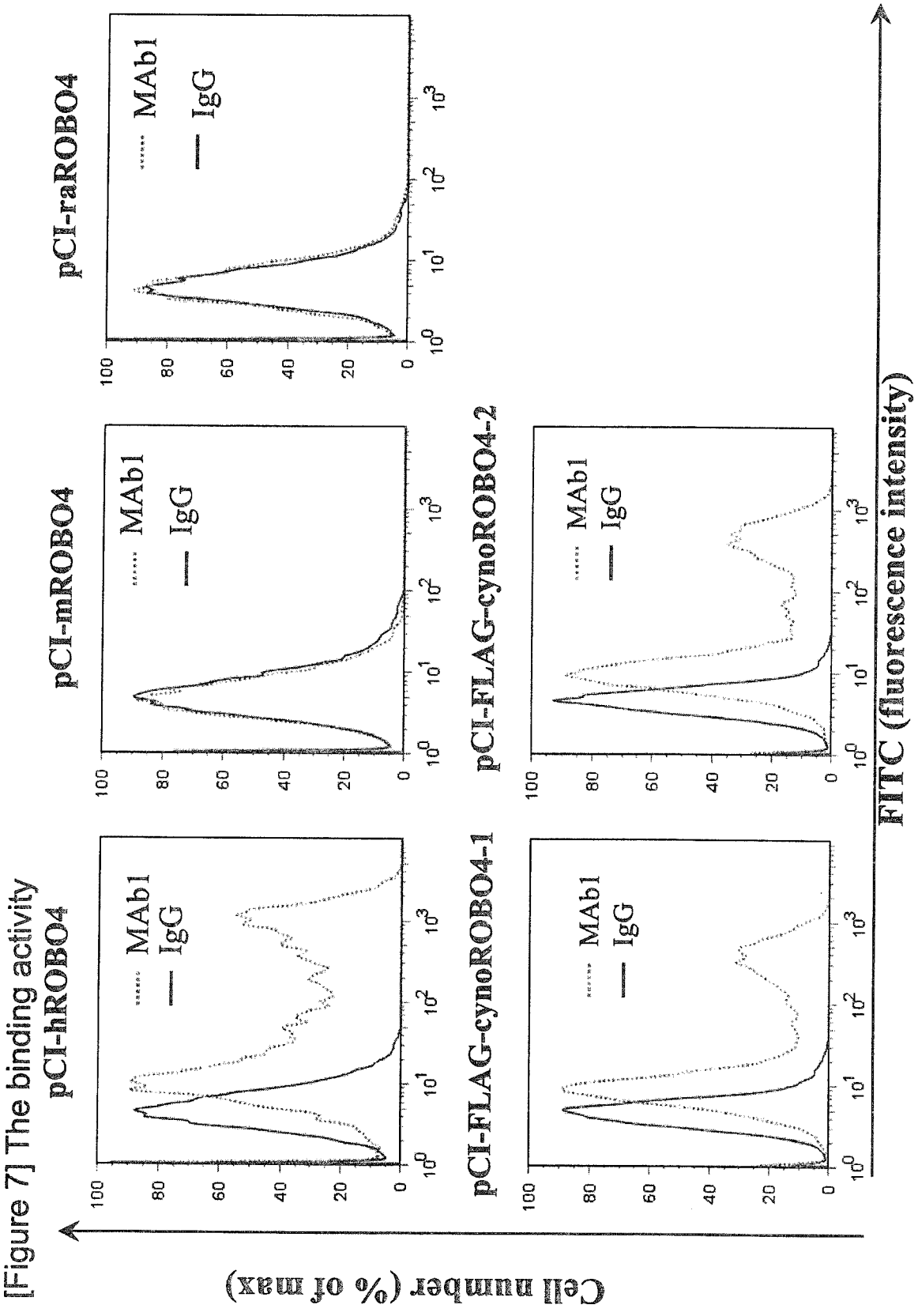
[Figure 5] The migratory capacity of HUVEC



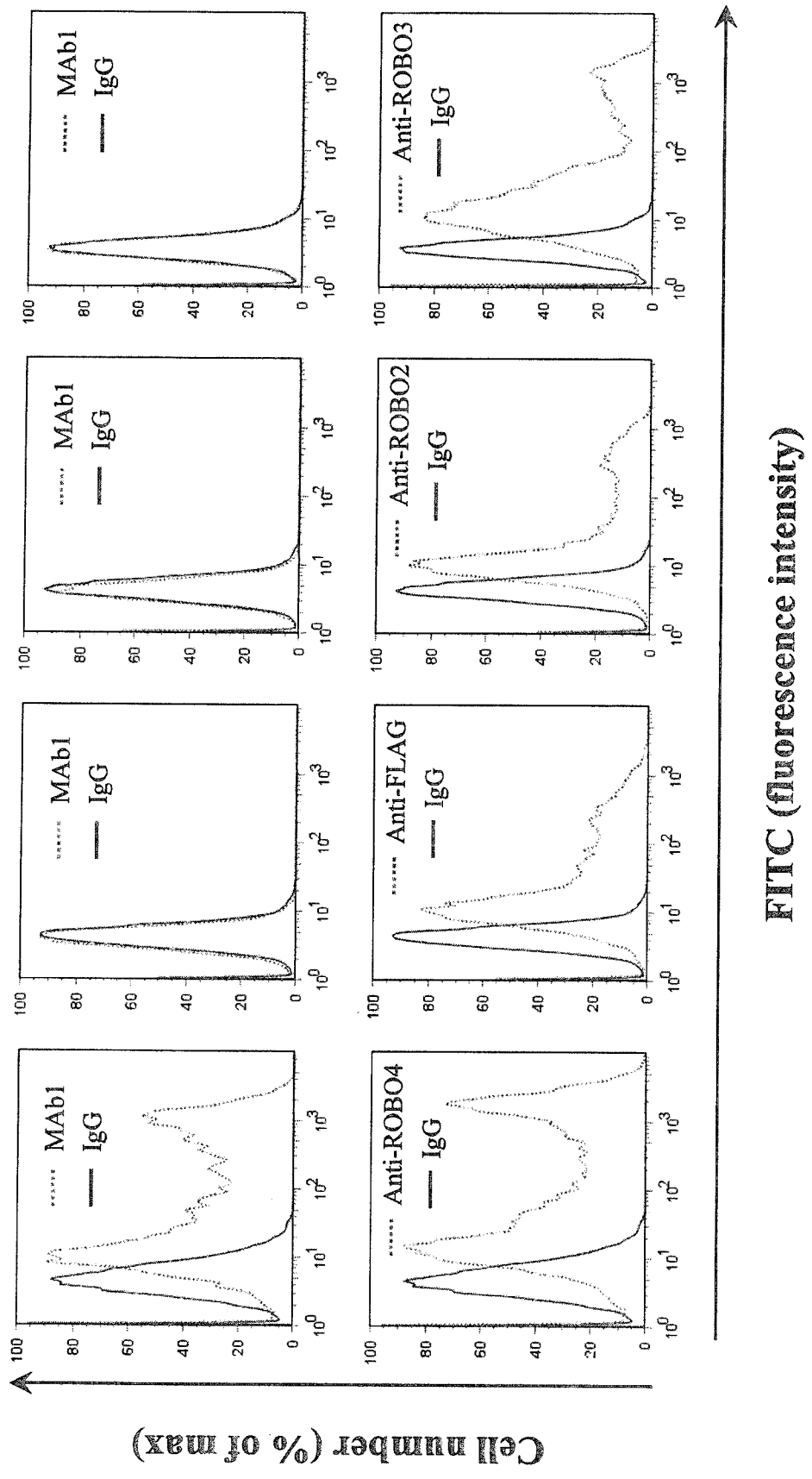
[Figure 6] The migratory capacity of HUVEC



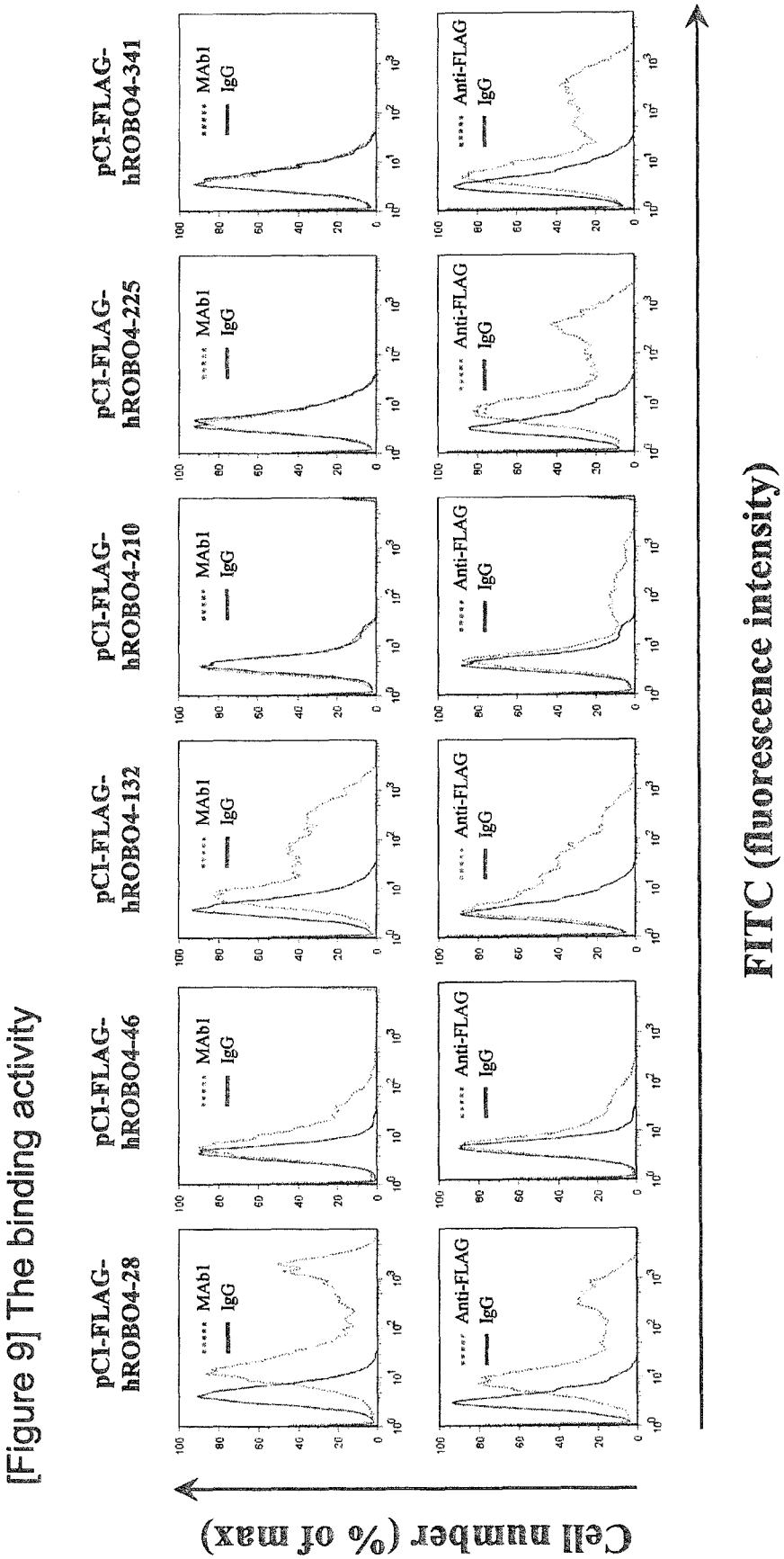
[Figure 7] The binding activity



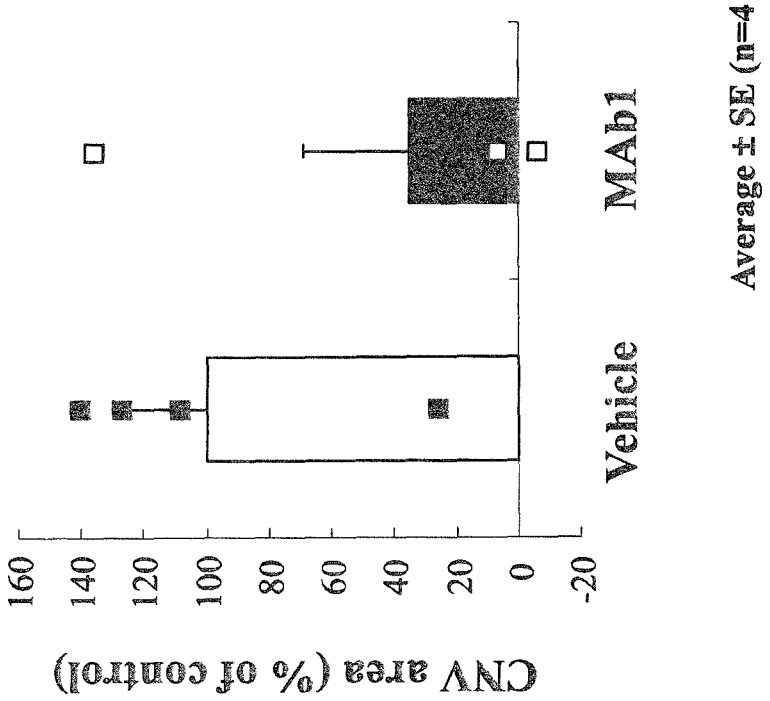
[Figure 8] The binding activity



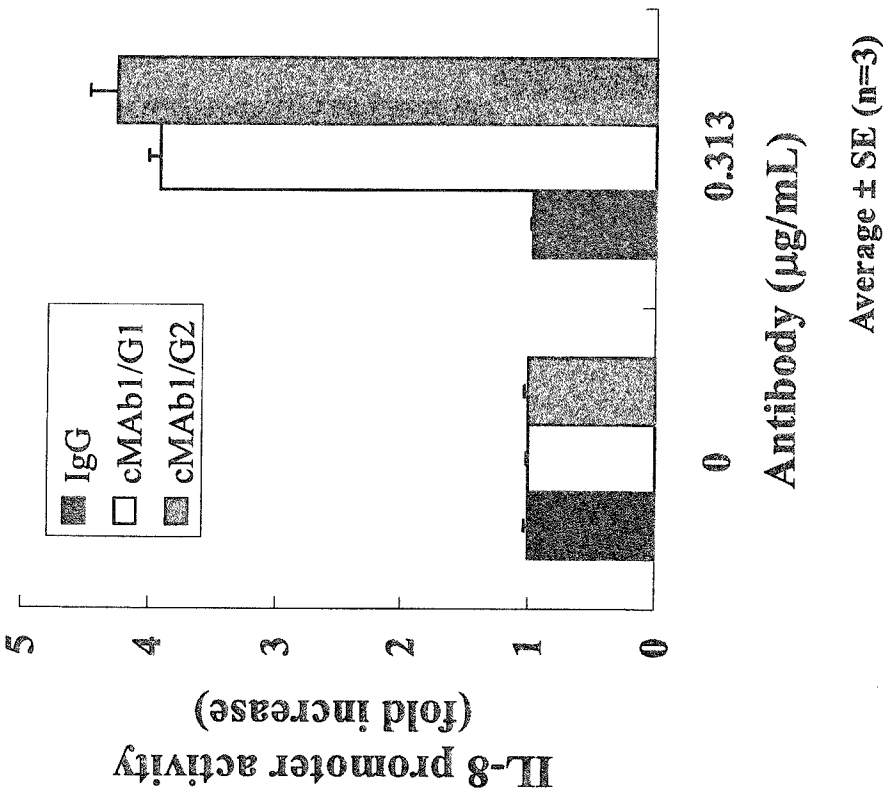
[Figure 9] The binding activity



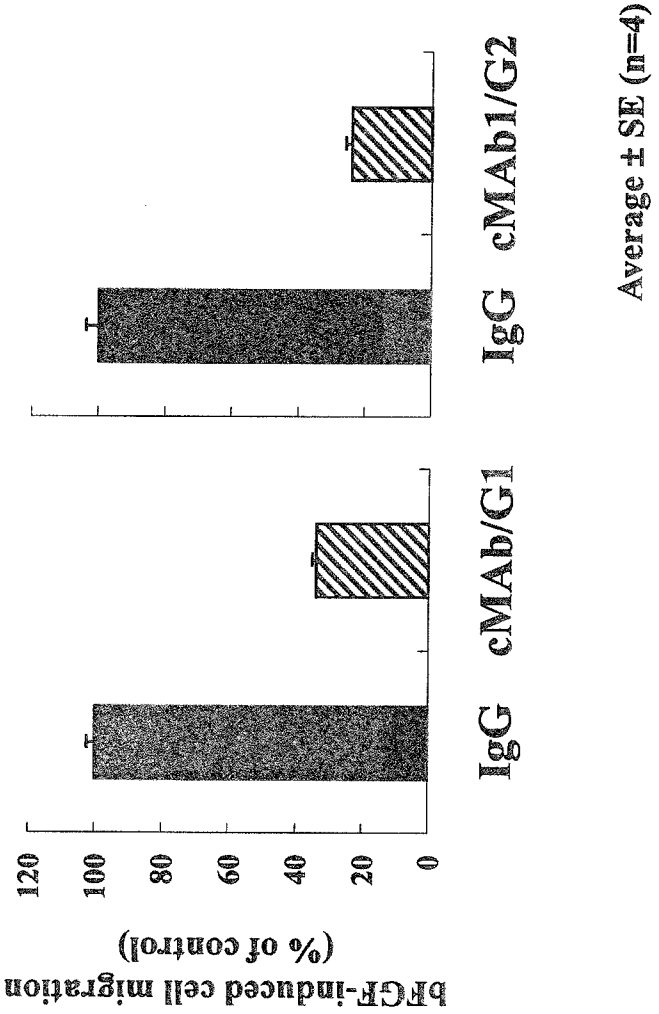
[Figure 10] In vivo efficacy of MAb1



[Figure 11] IL-8 promoter activity



[Figure 12] The migratory capacity of HUVEC



【Figure 13】 cDNA encoding full-length human ROBO4 (SEQ ID NO: 1)

atgggctctggaggagacagcctcctgggggcaggggttccctgcctctgctgctcctgctcatcatgggaggcatggctcag
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agattactcctga
stop codon

[Figure 14] The full-length amino acid sequence of human ROBO4 (SEQ ID NO: 2)
MGSGGDSLLGGRGSLPLLLLLLIMGGMAQDSPPQILVHPQDQLFQGPGPARMSCQAS
GQPPPTIRWLLNGQPLSMVPPDPHHLLPDGTLLLLQPPARGHAHDGQALSTDLGVY
TCEASNRLGTAVSRGARLSVAVLREDFQIQPRDMVAVVGEQFTLECGPPWGHPEPTV
SWWKDGKPLALQPGRHTVSGGSLLMARAEKSDEGTYMCVATNSAGHRESRAARVS
IQEPQDYTEPVELLAVRIQLENVTLLNPDPAEGPKPRPAVWLSWKVSGPAAPAQSYT
ALFRTQTAPGGQGAPWAEELLAGWQSAELGGLHWGQDYEFKVRPSSGRARGPDSN
VLLLRLPEKVPSAPPQEVTLKPGNGTVFVSWVPPPAENHNGIIRGYQVWSLGNTSLP
PANWTVVGEQTQLEIATHMPGSYCVQVAAVTGAGAGEPSRPVCLLLEQAMERATQE
PSEHGPWTLEQLRATLKRPEVIATCGVALWLLLLGTAVCIHRRRRARVHLGPGLYRY
TSEDAILKHRMDHSDSQWLADTWRSTSGSRDLSSSSSLSSRLGADARDPLDCRRSL
LSWDSRSPGVPLLPDTSTFYGSLIAELPSSTPARPSPQVPAVRRLPPQLAQLSSPCSSS
DSLCSRRGLSSPRLSLAPAEAWKAKKKQELQHANSSPLLRGSHSLELRACELGNRG
SKNLSQSPGAVPQALVAWRALGPKLLSSSNELVTRHLPPAPLFPHETPPTQSQQTQP
PVAPQAPSSILLPAAPIPILSPCSPPSPQASSLSGPSPASSRLSSSSLSSLGEDQDSVLTP
EEVALCLELSEGEETPRNSVSPMPRAPSPPTTYGYISVPTASEFTDMGRTGGGVGPK
GGVLLCPPRPCLTPTPSEGSLANGWGSASEDNAASARASLVSSSDGSFLADAHFARA
LAVAVDSFGFGLEPREADCVFIDASSPPSPRDEIFLTPNLSLPLWEWRPDWLEDMEV
SHTQRLGRGMPPWPPDSQISSQRSQLHCRMPKAGASPVDYS

[Figure 15] The nucleotide sequence of cDNA encoding the heavy chain variable region of MAb1 (SEQ ID NO: 30)
gaagtgcagctggtggagtctgggggaggcttagtgaagcctggagggtccctgaaactctcctgtgcagcctctggattcactttca
gtacctatgccatgtcttgggttcgccagactccggagaagaggctggagtgggtcgcaaccattagtaatggtggtacttacacct
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tctgaggacacggccatgtatttctgtgcaagactaatctactatgattaccttgactactggggccacggcaccactctcacagtctc
ctca

[Figure 16] The amino acid sequence of the MAb1 heavy chain variable region (SEQ ID NO: 31)
EVQLVESGGGLVKPGGSLKLSCAASGFTFSTYAMSWVRQTPEKRLEWVATISNGGTYTY

YPDSVKGRFTISRDNAENTLYLQMSSLRSEDTAMYFCARLIYYDYLDYWGHGTTLTVSS

[Figure 17] The nucleotide sequence of cDNA encoding the light chain variable region of MAb1 (SEQ ID NO: 32)

gatgctgtgatgacccaaactccactctccctgcctgtcagtcttggagatcaagcctccatctcttgcaggtctagtcagagccttga
aaacagtaatggaaacacctatttgaactggtacttccagaaaccaggccagtctccacagctcctgatctacagggtttccaaccg
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tcggagtttatttctgcctccaagttactcatgtcccgtggacgttcggtggaggcaccaagctggaaatcaaacgggct

[Figure 18] The amino acid sequence of the MAb1 light chain variable region (SEQ ID NO: 33)

DAVMTQTPLSLPVSLGDQASISCRSSQSLENSNGNTYLNWYFQKPGQSPQLLIYRVS
NRFSGVLDRFSGSGSGTDFTLKISRVEAEDFGVYFCLQVTHVPWTFGGGTKLEIKRA

[Figure 19] Figure 19 shows the nucleotide sequence of cDNA encoding the light chain of cMAb1 (SEQ ID NO: 37)

atggtgctgcagacccaggtgttcatctccctgctgctgtggatctccggcgcgtacggcgatgctgtgatgacccaaactccactctc
cctgcctgtcagtcttggagatcaagcctccatctcttgcaggtctagtcagagccttgaaaacagtaatggaaacacctatttgaac
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aacgccctgcagtccgggaactcccaggagagcgtgaccgagcaggacagcaaggacagcacctacagcctgagcagcaccctga
ccctgagcaaagccgactacgagaagcacaaggtgtacgcctgcgaggtgacccaccagggcctgagctcccccgtcaccaagagc
ttcaacaggggggagtgt

Secretory signal sequence(1-60), Variable region(61-402), Constant region(403-717)

[Figure 20] The amino acid sequence of the cMAb1 light chain (SEQ ID NO: 38)

MVLQTQVFISLLLWISGAYGDAVMTQTPLSLPVSLGDQASISCRSSQSLENSNGNTYLNW
YFQKPGQSPQLLIYRVSNRFSGVLDRFSGSGSGTDFTLKISRVEAEDFGVYFCLQVTHVP
WTFGGGTKLEIKRAVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNAL
QSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGE
C

Secretory signal sequence(1-20), Variable region(21-134), Constant region(135-239)

[Figure 21] The nucleotide sequence of cDNA encoding the heavy chain of cMAb1-1 (SEQ ID NO: 39)

atgaaacacctgtggttcttcctcctgctggtggcagctcccagatgggtgctgagcgaagtgcagctggtggagtctgggggg
aggcttagtgaagcctggagggtccctgaaactctcctgtgcagcctctggattcactttcagtacctatgccatgtcttgggttc
gccagactccggagaagaggctggagtgggtcgcaaccattagtaatggtggtacttacacctactatccagacagtgtgaa
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atgctccgtgatgcatgaggctctgcacaaccactacacccagaagagcctctccctgtctcccggcaaa

Secretory signal sequence(1-57), Variable region(58-411), Constant region(412-1401)

[Figure 22] The amino acid sequence of the cMAb1-1 heavy chain (SEQ ID NO: 40)

MKHLWFFLLLVAAPRWVLSEVQLVESGGGLVKPGGSLKLSCAASGFTFSTYAMSWV
RQTPEKRLEWVATISNGGTYTYYPDSVKGRFTISRDNAENTLYLQMSSLRSEDTAMY
FCARLIYYDYLDYWGHGTTLTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYF
PEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSN
TKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEY
KCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD
IAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL
HNHYTQKSLSLSPGK

Secretory signal sequence(1-19), Variable region(20-137), Constant region(138-467)

[Figure 23] The nucleotide sequence of cDNA encoding the heavy chain of cMAb1-2 (SEQ ID NO: 41)

atgaaacacctgtggttcttcctcctgctggtggcagctcccagatgggtgctgagcgaagtgcagctggtggagtctgggggaggc
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Secretory signal sequence(1-57), Variable region(58-411), Constant region(412-1389)

[Figure 24] The amino acid sequence of the cMAb1-2 heavy chain (SEQ ID NO: 42)

MKHLWFFLLLVAAPRWVLSEVQLVESGGGLVKPGGSLKLSCAASGFTFSTYAMSWV
RQTPEKRLEWVATISNGGTYTYYPDSVKGRFTISRDNAENTLYLQMSSLRSEDTAMY
FCARLIYYDYLDYWGHGTTLTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFP
EPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSNFGTQTYTCNVDHKPSN
TKVDKTVERKCCVECPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE
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SNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN
HYTQKSLSLSPGK

Secretory signal sequence(1-19), Variable region(20-137), Constant region(138-463)

[Figure 25] The amino acid sequence of the heavy chain CDRH1 of MAb1 (SEQ ID NO: 44)
TYAMS

[Figure 26]The amino acid sequence of the heavy chain CDRH2 of MAb1 (SEQ ID NO: 46)
TISNGGTYTYYPDSVKG

[Figure 27] The amino acid sequence of the heavy chain CDRH3 of MAb1 (SEQ ID NO: 48)
LIYYDYLDY

[Figure 28] The amino acid sequence of the light chain CDRL1 of MAb1 (SEQ ID NO: 50)
RSSQSLENSNGNTYLN

[Figure 29] The amino acid sequence of the light chain CDRL2 of MAb1 (SEQ ID NO: 52)
RVSNRFS

[Figure 30] The amino acid sequence of the light chain CDRL3 of MAb1 (SEQ ID NO: 54)
LQVTHVPWT

[Figure 31] The nucleotide sequence of cDNA encoding a hMAb1-H1-type heavy chain (SEQ ID NO: 55).

atgaaacacctgtggttcttcctcctgctggtggcagctcccagatgggtgctgagcgaggtgcagctggtggaaagcg
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tgcccctatcgagaagaccatctccaagaccaagggccaacctcgtgagcctcaagtgtacacccttcctcctagccgtg
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gtccaacggacaacctgagaacaactacaagaccacccctcctatgcttgacagcgacggctccttcttcctgtacagca
agctgaccgtggacaagtcccgttggcaacaaggcaacgtgttcagctgttccgtgatgcacgaggccctgcacaacca
ctacacccaaaagagcctttccctgagccctggaaag

Secretory signal sequence(1-57),Variable region (58-411),Constant region(412-1389)

[Figure 32] The amino acid sequence of the hMAb1-H1-type heavy chain (SEQ ID NO: 56)

MKHLWFFLLLVAAPRWVLSEVQLVESGGGLVQPGGSLRLSCAASGFTFSTYAMS
WVRQAPGKGLEWVATISNGGTYTYYPDSVKGRFTISRDNAKNTLYLQMNSLRA
EDTAVYYCARLIYYDYLDYWGQGTLVTVSSASTKGPSVFPLAPCSRSTSESTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSNFGTQT
YTCNVDHKPSNTKVDKTVERKCCVECPPCPAPPVAGPSVFLFPPKPKDTLMISR
TPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVVSVLTV
VHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKN
QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPMLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Secretory signal sequence(1-19), Variable region(20-137), Constant region(138-463)

[Figure 33] The nucleotide sequence of cDNA encoding a hMAb1-H2-type heavy chain (SEQ ID NO: 57).

atgaaacacctgtggttcttcctcctgctggtggcagctcccagatgggtgctgagcgaggtgcagctggtggaaagcg
gcggaggcctggtgcagcctggcggctctctgagactgagctgtgccgccagcggcttcaccttcagcacctacgccatg
agctgggtccgacaggcccctggcaagggactggaatgggtggcaaccatcagccaaggcggcacctacacctactac
cccgacagcgtgaagggccggttcaccatcagccgggacaacgccaagaacaccctgtacctgcagatgaacagcctg
cgggccgaggacaccgccgtgtactactgcgccagactgatctactacgactacctggactactggggccagggcaccc
tggtcaccgtcagctcagccagcaccaagggcccttccgtgttccctctggccccttgtagccgttccaccagcgagtccac
cgccgcccttggctgtctggtgaaggactacttccctgagcctgtgaccgtgagctggaactccggagcccttaccagcg
gcgtgcacaccttccctgccgtgctgcagtccagcggcctttactccctgagctccgtggtgaccgtgcctagctccaactt
cggcacccaaacctacacctgtaacgtggaccacaagcctagcaacaccaaggtggacaagaccgtggagcgtaagt
gttgtgtggagtgtcctccttgtcctgcccctcctgtggccggaccttccgtgttccttttccctcctaagcctaaggacaccc
tgatgatcagccgtacccctgaggtgacctgtgtggtggtggacgtgtcccacgaggaccctgaggtgcagttcaactg
gtacgtggacggcgtggaggtgcacaacgccaagaccaagcctcgtgaggagcaattcaacagcaccttccgtgtggt
gtccgtgcttaccgtggtgcaccaagactggctgaacggcaaggagtacaagtgtaaggtgagcaacaagggacttcc
tgcccctatcgagaagaccatctccaagaccaagggccaacctcgtgagcctcaagtgtacacccttcctcctagccgtg
aggagatgaccaagaaccaagtgtcccttacctgtctggtgaagggcttctaccctagcgacatcgccgtggagtggga
gtccaacggacaacctgagaacaactacaagaccacccctcctatgcttgacagcgacggctccttcttcctgtacagca
agctgaccgtggacaagtcccgttggcaacaaggcaacgtgttcagctgttccgtgatgcacgaggccctgcacaacca
ctacacccaaaagagcctttccctgagccctggaaag

Secretory signal sequence(1-57), Variable region(58-411), Constant region(412-1389)

[Figure 34] The amino acid sequence of the hMAb1-H2-type heavy chain (SEQ ID NO: 58).

MKHLWFFLLLVAAPRWVLSEVQLVESGGGLVQPGGSLRLSCAASGFTFSTYAMS
WVRQAPGKGLEWVATISQGGTYTYYPDSVKGRFTISRDNAKNTLYLQMNSLRA
EDTAVYYCARLIYYDYLDYWGQGTLVTVSSASTKGPSVFPLAPCSRSTSESTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSNFGTQT
YTCNVDHKPSNTKVDKTVERKCCVECPPCPAPPVAGPSVFLFPPKPKDTLMISR
TPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVVSVLTV
VHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKN
QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPMLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Secretory signal sequence(1-19), Variable region(20-137), Constant region(138-463)

[Figure 35] The nucleotide sequence of cDNA encoding a hMAb1-H3-type heavy chain (SEQ ID NO: 59)

atgaaacacctgtggttcttcctcctgctggtggcagctcccagatgggtgctgagcgaggtgcagctggtggaaagcg
gcggaggcctggtgcagcctggcggctctctgagactgagctgtgccgccagcggcttcaccttcagcacctacgccatg
agctgggtccgacaggcccctggcaagcggctggaatgggtggcaaccatcagcaacggcggcacctacacctactac
cccgacagcgtgaagggccggttcaccatcagccgggacaacgccaagaacaccctgtacctgcagatgaacagcctg
cgggccgaggacaccgccgtgtactactgcgccagactgatctactacgactacctggactactggggccagggcaccc
tggtcaccgtcagctcagccagcaccaagggcccttccgtgttccctctggccccttgtagccgttccaccagcgagtccac
cgccgcccttggctgtctggtgaaggactacttccctgagcctgtgaccgtgagctggaactccggagcccttaccagcg
gcgtgcacaccttccctgccgtgctgcagtccagcggcctttactccctgagctccgtggtgaccgtgcctagctccaactt
cggcacccaaacctacacctgtaacgtggaccacaagcctagcaacaccaaggtggacaagaccgtggagcgtaagt
gttgtgtggagtgtcctccttgtcctgcccctcctgtggccggaccttccgtgttccttttccctcctaagcctaaggacaccc
tgatgatcagccgtacccctgaggtgacctgtgtggtggtggacgtgtcccacgaggaccctgaggtgcagttcaactg
gtacgtggacggcgtggaggtgcacaacgccaagaccaagcctcgtgaggagcaattcaacagcaccttccgtgtggt
gtccgtgcttaccgtggtgcaccaagactggctgaacggcaaggagtacaagtgtaaggtgagcaacaagggacttcc
tgcccctatcgagaagaccatctccaagaccaagggccaacctcgtgagcctcaagtgtacacccttcctcctagccgtg
aggagatgaccaagaaccaagtgtcccttacctgtctggtgaagggcttctaccctagcgacatcgccgtggagtggga
gtccaacggacaacctgagaacaactacaagaccacccctcctatgcttgacagcgacggctccttcttcctgtacagca
agctgaccgtggacaagtcccgttggcaacaaggcaacgtgttcagctgttccgtgatgcacgaggccctgcacaacca
ctacacccaaaagagcctttccctgagccctggaaag

Secretory signal sequence(1-57),Variable region(58-411),Constant region(412-1389)

[Figure 36] The amino acid sequence of the hMAb1-H3-type heavy chain (SEQ ID NO: 60)

MKHLWFFLLLVAAPRWVLSEVQLVESGGGLVQPGGSLRLSCAASGFTFSTYAMS
WVRQAPGKRLEWVATISNGGTYTYYPDSVKGRFTISRDNAKNTLYLQMNSLRA
EDTAVYYCARLIYYDYLDYWGQGTLVTVSSASTKGPSVFPLAPCSRSTSESTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSNFGTQT
YTCNVDHKPSNTKVDKTVERKCCVECPPCPAPPVAGPSVFLFPPKPKDTLMISR
TPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVVSVLTV
VHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKN
QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPMLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Secretory signal sequence(1-19), Variable region(20-137), Constant region(138-463)

[Figure 37] The nucleotide sequence of cDNA encoding a hMAb1-H4-type heavy chain (SEQ ID NO: 61)

atgaaacacctgtggttcttcctcctgctggtggcagctcccagatgggtgctgagcgaggtgcagctggtggaaagcg
gcggaggcctggtgcagcctggcggctctctgagactgagctgtgccgccagcggcttcaccttcagcacctacgccatg
agctgggtccgacaggcccctggcaagcggctggaatgggtggcaaccatcagccaaggcggcacctacacctactac
cccgacagcgtgaagggccggttcaccatcagccgggacaacgccaagaacaccctgtacctgcagatgaacagcctg
cgggccgaggacaccgccgtgtactactgcgccagactgatctactacgactacctggactactggggccagggcaccc
tggtcaccgtcagctcagccagcaccaagggcccttccgtgttccctctggccccttgtagccgttccaccagcgagtccac
cgccgcccttggctgtctggtgaaggactacttccctgagcctgtgaccgtgagctggaactccggagcccttaccagcg
gcgtgcacaccttccctgccgtgctgcagtccagcggcctttactccctgagctccgtggtgaccgtgcctagctccaactt
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gttgtgtggagtgtcctccttgtcctgcccctcctgtggccggaccttccgtgttccttttccctcctaagcctaaggacaccc
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gtacgtggacggcgtggaggtgcacaacgccaagaccaagcctcgtgaggagcaattcaacagcaccttccgtgtggt
gtccgtgcttaccgtggtgcaccaagactggctgaacggcaaggagtacaagtgtaaggtgagcaacaagggacttcc
tgcccctatcgagaagaccatctccaagaccaagggccaacctcgtgagcctcaagtgtacacccttcctcctagccgtg
aggagatgaccaagaaccaagtgtcccttacctgtctggtgaagggcttctaccctagcgacatcgccgtggagtggga
gtccaacggacaacctgagaacaactacaagaccacccctcctatgcttgacagcgacggctccttcttcctgtacagca
agctgaccgtggacaagtcccgttggcaacaaggcaacgtgttcagctgttccgtgatgcacgaggccctgcacaacca
ctacacccaaaagagcctttccctgagccctggaaag

Secretory signal sequence(1-57),Variable region(58-411),Constant region(412-1389)

[Figure 38] The amino acid sequence of the hMAb1-H4-type heavy chain (SEQ ID NO: 62)

MKHLWFFLLLVAAPRWVLSEVQLVESGGGLVQPGGSLRLSCAASGFTFSTYAMS
WVRQAPGKRLEWVATISQGGTYTYYPDSVKGRFTISRDNAKNTLYLQMNSLRA
EDTAVYYCARLIYYDYLDYWGQGTLVTVSSASTKGPSVFPLAPCSRSTSESTAAL
GCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSNFGTQT
YTCNVDHKPSNTKVDKTVERKCCVECPPCPAPPVAGPSVFLFPPKPKDTLMISR
TPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVVSVLTV
VHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKN
QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPMLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Secretory signal sequence(1-19), Variable region(20-137), Constant region(138-463)

[Figure 39] The nucleotide sequence of cDNA encoding a hMAb1-L1-type light chain (SEQ ID NO: 63)

atggtgctgcagacccaggtgttcatctccctgctgctgtggatctccggcgcgtacggcgacatcgtgatgacccagag
ccccctgagcctgcccgtgacactgggcgagcctgccagcatcagctgcagaagcagccagagcctggaaaacagcaa
cggcaacacctacctgaactggtatctgcagaagcccggccagtccccccagctgctgatctaccgggtgtccaaccggt
tcagcggcgtgcccgacagattcagcggcagcggctccggcaccgacttcaccctgaagatcagccgggtggaagccg
aggacgtgggcgtgtactactgtctgcaggtcacacacgtgccctggaccttcggccctggcaccaaggtggacatcaa
gcgtacggtggccgccccctccgtgttcatcttcccccctccgacgagcagctgaagtccggcaccgcctccgtggtgtgc
ctgctgaataacttctaccccagagaggccaaggtgcagtggaaggtggacaacgccctgcagtccgggaactcccag
gagagcgtgaccgagcaggacagcaaggacagcacctacagcctgagcagcaccctgaccctgagcaaagccgacta
cgagaagcacaaggtgtacgcctgcgaggtgacccaccagggcctgagctcccccgtcaccaagagcttcaacagggg
ggagtgt

Secretory signal sequence(1-60), Variable region(61-402), Constant region(403-717)

[Figure 40] The amino acid sequence of the hMAb1-L1-type light chain (SEQ ID NO: 64)

MVLQTQVFISLLLWISGAYGDIVMTQSPLSLPVTLGEPASISCRSSQSLENSNGNT
YLNWYLQKPGQSPQLLIYRVSNRFSGVPDRFSGSGSGTDFTLKISRVEAEDVGV
YYCLQVTHVPWTFGPGTKVDIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFY
PREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
CEVTHQGLSSPVTKSFNRGEC

Secretory signal sequence(1-20), Variable region(21-134), Constant region(135-239)

[Figure 41] The nucleotide sequence of cDNA encoding a hMAb1-L2-type light chain (SEQ ID NO: 65)

atggtgctgcagacccaggtgttcatctccctgctgctgtggatctccggcgcgtacggcgacatcgtgatgacccagag
ccccctgagcctgcccgtgacactgggcgagcctgccagcatcagctgcagaagcagccagagcctggaaaacgagaa
caagaacctgtacctgaactggtatctgcagaagcccggccagtccccccagctgctgatctaccgggtgtccaaccggt
tcagcggcgtgcccgacagattcagcggcagcggctccggcaccgacttcaccctgaagatcagccgggtggaagccg
aggacgtgggcgtgtactactgtctgcaggtcacacacgtgccctggaccttcggccctggcaccaaggtggacatcaa
gcgtacggtggccgcccccctccgtgttcatcttcccccccctccgacgagcagctgaagtccggcaccgcctccgtggtgtgc
ctgctgaataacttctaccccagagaggccaaggtgcagtggaaggtggacaacgccctgcagtccgggaactcccag
gagagcgtgaccgagcaggacagcaaggacagcacctacagcctgagcagcaccctgaccctgagcaaagccgacta
cgagaagcacaaggtgtacgcctgcgaggtgacccaccagggcctgagctccccgtcaccaagagcttcaacagggg
ggagtgt

Secretory signal sequence(1-60), Variable region(61-402), Constant region(403-717)

[[Figure 42] The amino acid sequence of the hMAb1-L2-type light chain (SEQ ID NO: 66)

MVLQTQVFISLLLWISGAYGDIVMTQSPLSLPVTLGEPASISCRSSQSLENENKNL
YLNWYLQKPGQSPQLLIYRVSNRFSGVPDRFSGSGSGTDFTLKISRVEAEDVGV
YYCLQVTHVPWTFGPGTKVDIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFY
PREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
CEVTHQGLSSPVTKSFNRGEC

Secretory signal sequence(1-20), Variable region(21-134), Constant region(135-239)

[Figure 43] The amino acid sequence of CDRH1 of the hMAb1-H2- or hMAb1-H4-type heavy chain (SEQ ID NO: 67).

TYAMS

[Figure 44] The amino acid sequence of CDRH2 of the hMAb1-H2- or hMAb1-H4-type heavy chain (SEQ ID NO: 68)

TISQGGTYTYYPDSVKG

[Figure 45] The amino acid sequence of CDRH3 of the hMAb1-H2- or hMAb1-H4-type heavy chain (SEQ ID NO: 69)

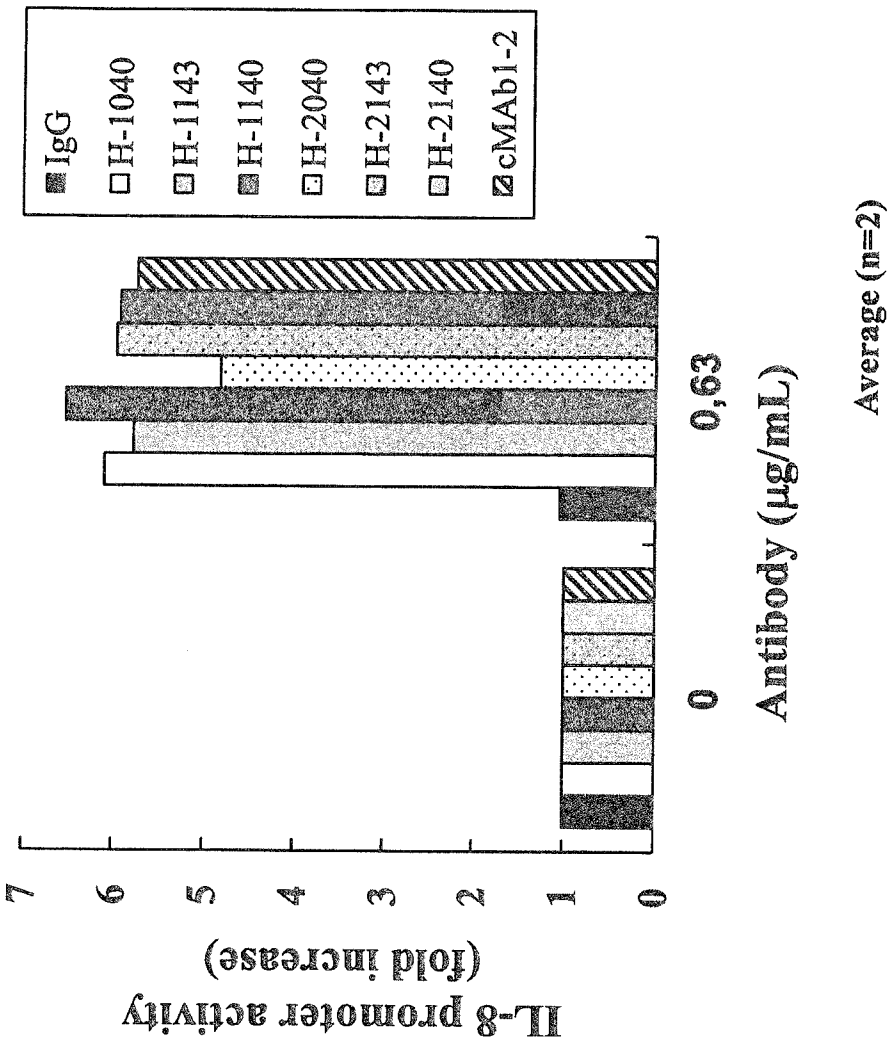
LIYYDYLDY

[Figure 46] The amino acid sequence of CDRL1 of the hMAb1-L2-type light chain (SEQ ID NO: 70)
RSSQSLENENKNLYLN

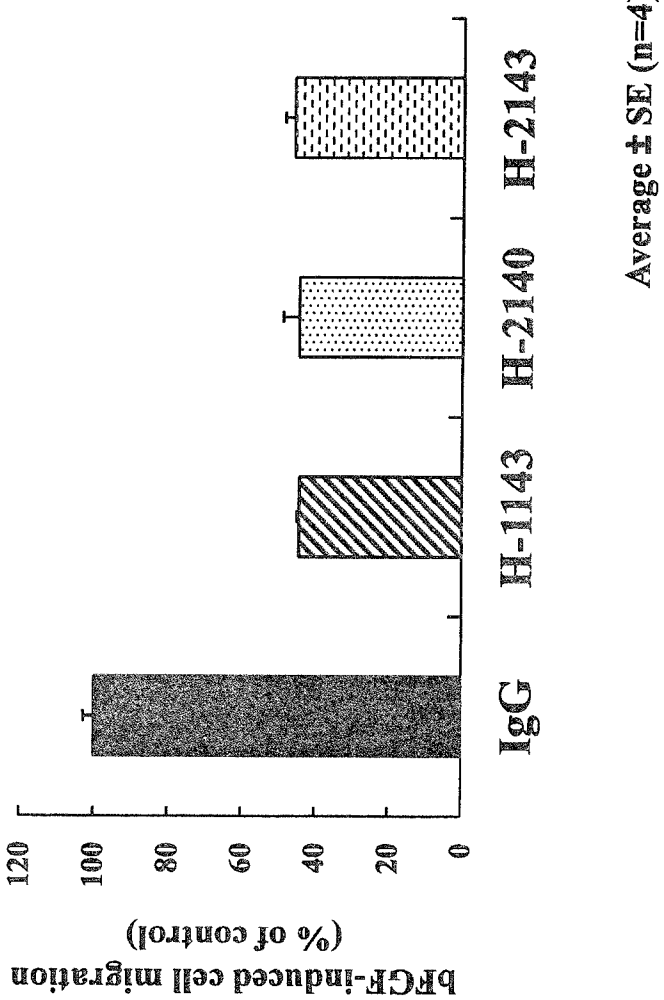
[Figure 47] The amino acid sequence of CDRL2 of the hMAb1-L2-type light chain (SEQ ID NO: 71)
RVSNRFS

[Figure 48] The amino acid sequence of CDRL3 of the hMAb1-L2-type light chain (SEQ ID NO: 72).
LQVTHVPWT

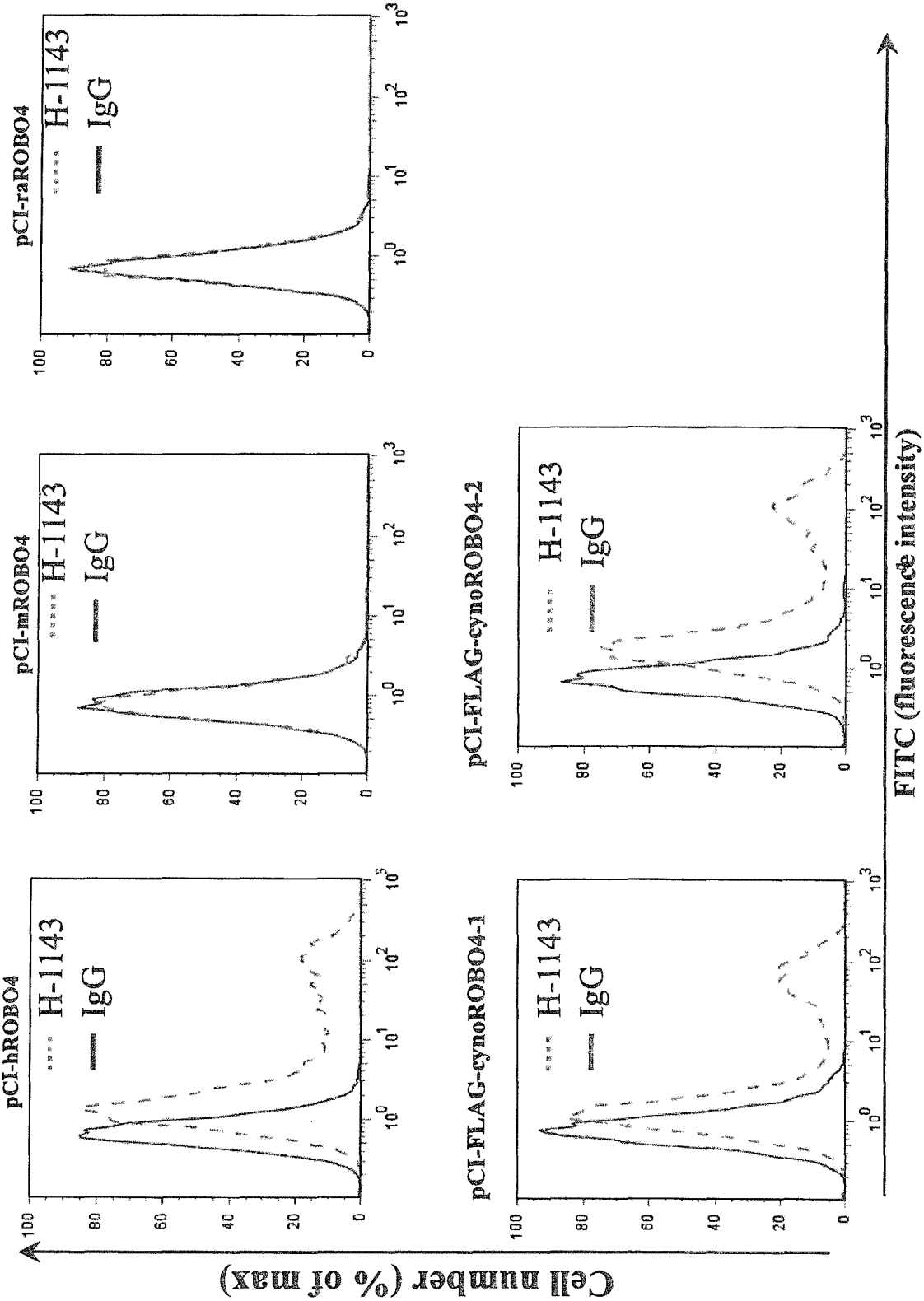
[Figure 49] IL-8 promoter activity assay



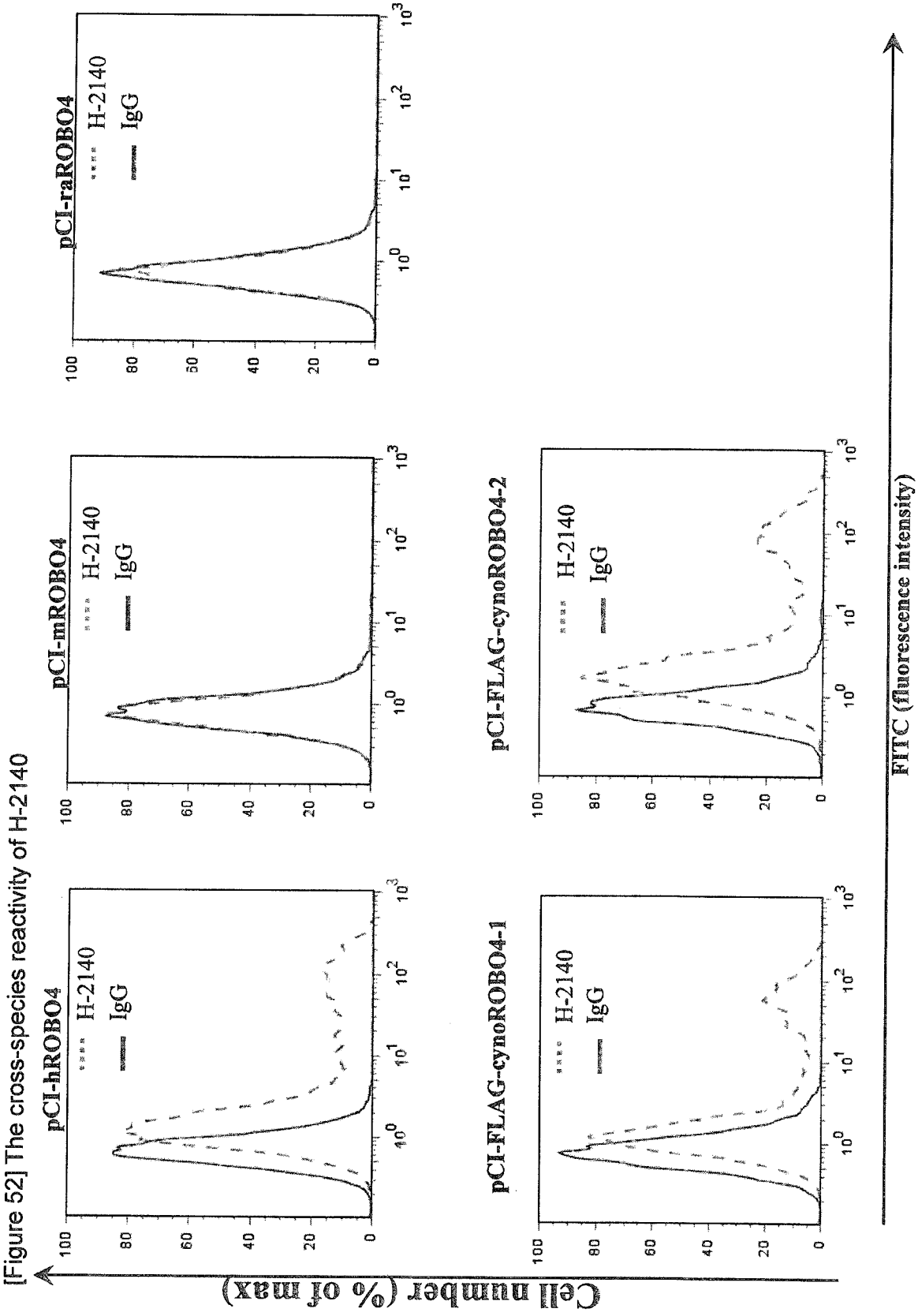
[Figure 50] bFGF-induced HUVEC migration assay



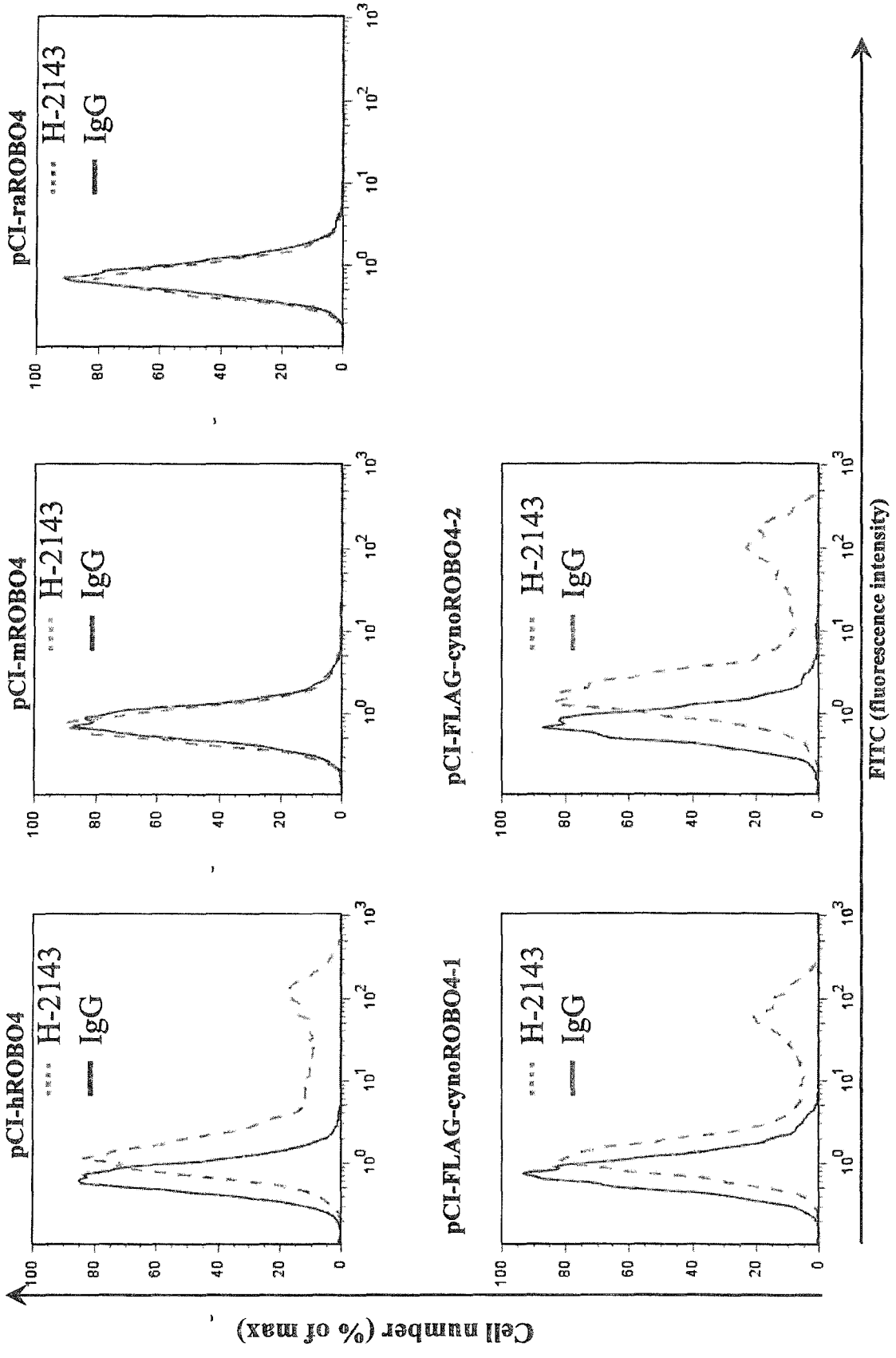
[Figure 51] The cross-species reactivity of H-1143



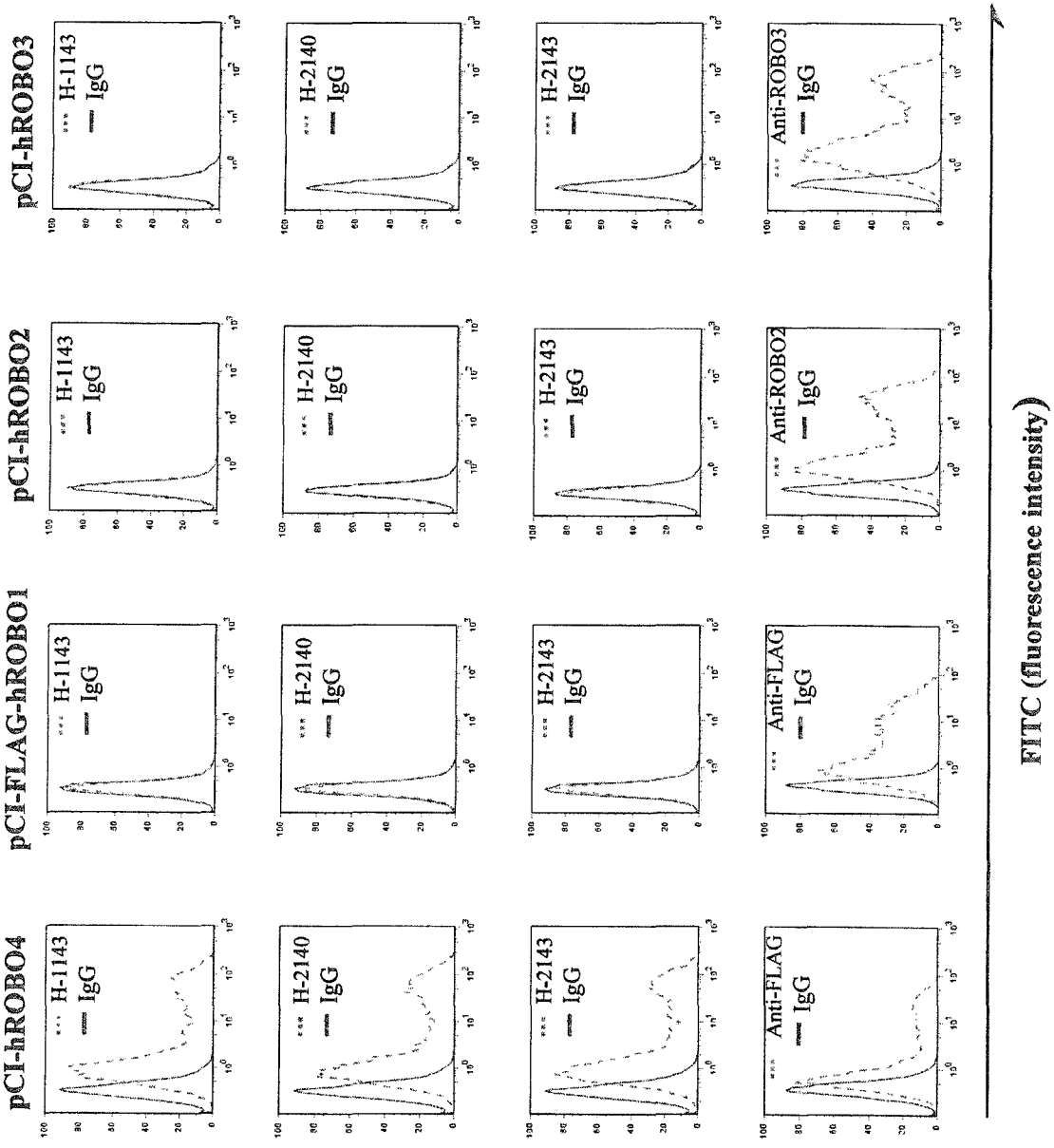
[Figure 52] The cross-species reactivity of H-2140

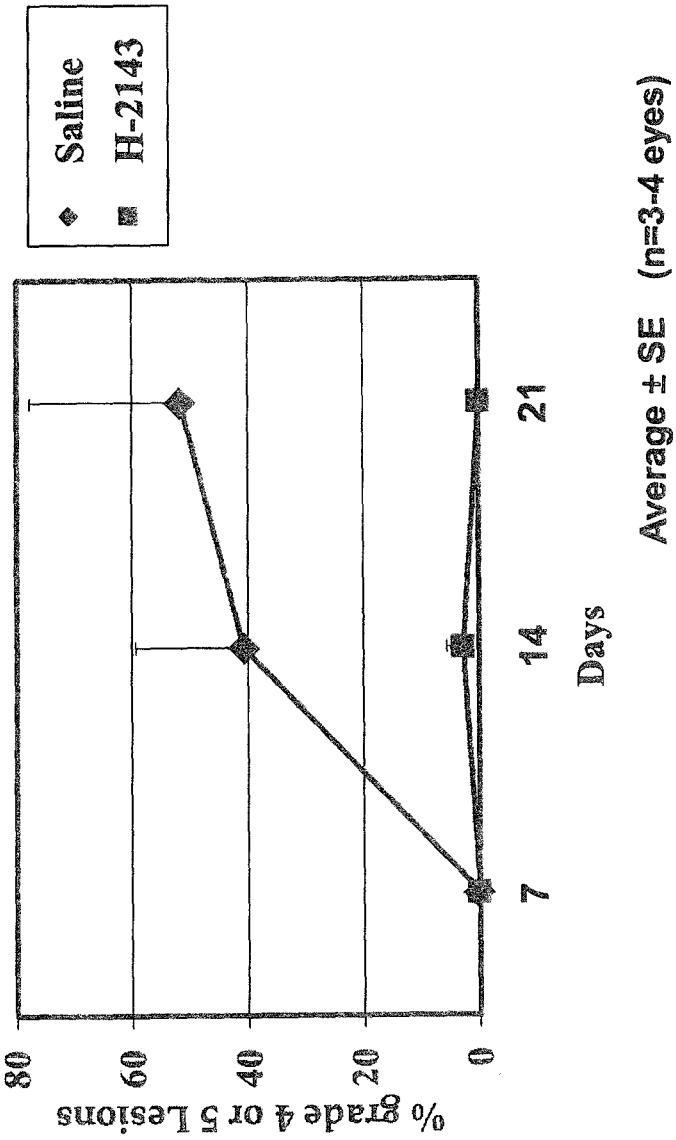


[Figure 53] The cross-species reactivity of H-2143



[Figure 54] The binding specificity of H-1143, H-2140, or H-2143





[Figure 55] In vivo efficacy of H-2143