

FIGURE 1

CA019_969 Ab sequences

5 CDR-L1

LASEDIYDNLA SEQ ID NO:1

CDRL2

10

YASSLQD SEQ ID NO:2

CDR-L3

15

LQDSEYPWT SEQ ID NO:3

CDR-H1

20

GFSLTTYGMGVG SEQ ID NO:4

CDR-H2

NIWWDDDKYYNPSLKN SEQ ID NO:5

25

CDR-H3

IGPIKYPTAPYRYFDF SEQ ID NO:6

FIGURE 1 continued

969 gL7 V-region SEQ ID NO: 7

5 DIQMTQSPSS LSASVGDRVIT ITCLASEDIY DNLAWYQQKP GKAPKLLIYY
 ASSLQDGVPS RFSGSGSGTD YTLTISSLQP EDFATYYCLQ DSEYPWTFGG
 GTKVEIK

969 gL7 V-region SEQ ID NO: 8

10 gacatacaga tgactcagtc accctcaagc ctgagtgccg gtgtggggaga
 caggggtgaca atcacctgtc tggcctccga ggatatctac gataacctgg
 catgggtatca gcagaaacct ggaaaggctc ccaagctcct gatttattat
 gcctcctctc tccaagacgg cgttccatct cggttcagcg gaagcggctc
 cgggacggat tacacactga caattagctc tctgcaaccg gaggattttg
 15 ctacttacta ctgcctgcaa gactccgaat acccatggac cttcgggtggt
 ggcaccaaag tggaaatcaa g

969 gH2 V-region SEQ ID NO: 9

20 EVTLKESGPA LVKPTQTLTL TCTFSGFSLT TYGMGVGWIR QPPGKALEWL
 ANIWWDDDKY YNPSLKNRLT ISKDTSKNQV VLTMTNMDPV DTATYYCARI
 GPIKYPTAPY RYFDFWGQGT MVTVS

969 gH2 V-region SEQ ID NO: 10

25 gaagtgacac tcaaggagtc tggacccgct ctggtgaaac caacccaaac
 actcactttg acatgtactt ttagtggcct ctcatgtact acctatggaa
 tgggcggtggg atggatcaga cagccacctg gcaaggctct ggaatggctg
 gccaacatct ggtgggatga cgacaagtac tataacccgt ccctgaaaaa
 30 ccggctgacc attagcaagg atacttctaa aaatcaagtg gtgctgacca
 tgacaaatat ggatcccgtt gacaccgcaa cctactactg cgcccgcatt
 ggtcccataa agtaccctac ggcaccttac cgatatttcg acttttgggg
 ccaagggaca atggttactg tctcg

35

FIGURE 1 continued**Amino acid sequence for CSF-1R SEQ ID NO: 11**

5 MGPGVLLLLL VATAWHGQGI PVIEPSVPEL VVKPGATVTL RCVGNNGSVEW
 DGPPSPHWTLYSDGSSSILSTNNATFQNTG TYRCTEPGDP LGGSAAIHLY
 VKDPPARPWNV LAQEVVVFED QDALLPCLLT DVPLEAGVSL VRVRGRPLMR
 HTNYSFSPWH GFTIHRAKFI QSQDYQCSAL MGGRKVMSIS IRLKVQKVIP
 GPPALTLVPA ELVRIRGEAA QIVCSASSVD VNFDVFLQHN NTKLAIPQQS
 DFHNNRYQKV LTLNLDQVDF QHAGNYSCVA SNVQKGHSTS MFFRVVESAY
 10 LNLSSSEQNLI QEVTVGEGLN LKVMVEAYPG LQGFNWTYLG PFSDHQPEPK
 LANATTKDTY RHTFTLSLPR LKPSEAGRYS FLARNPGGWR ALTFELTLRY
 PPEVSVIWF INGSGTLLCA ASGYQPQNVTLQCSGHTDR CDEAQVLQVW
 DDPYPEVLSQ EPFHKVTVQS LLTVETLEHN QTYECRAHNS VSGSGSWAFIP
 ISAGAHTHP DEFLETPVVV ACMSIMALLL LLLLLLLYKY KQKPKYQVRW
 15 KIIESYEGNS YTFIDPTQLP YNEKWEFPRN NLQFGKTLGA GAFGKVVEAT
 AFGLGKEDAV LKVAVKMLKS TAHADEKEAL MSELKIMSHL QHENIVNLL
 GACTHGGPVL VITEYCCYGD LLNFLRRKAE AMLGPSLSPG QDPEGGV DYK
 NIHLEKKYVR RDSGFSSQGV DTYVEMRPVS TSSNDSFSEQ DLDKEDGRPL
 ELRDLHFSS QVAQGMFLA SKNCIHRDVA ARNVLLTNGH VAKIGDFGLA
 20 RDIMNDSNYI VKGNARLPVK WMAPESIFDC VYTVQSDVWS YGILLWEIFS
 LGLNPYPGIL VNSKFYKLVK DGYQMAQPAF APKNIYSIMQ ACWALEPTHR
 PTFQQICSFL QEQAQEDRRE RDTNLPSSS RSGSGSSSS ELEEESSSEH
 LTCCEQGDIA QPLLQPNNYQ FC

25 Amino acid sequence for CSF-1R SEQ ID NO: 12

IPVIEPSVPELVVKPGATVTLRCVGNNGSVEWDGPPSPHWTLYSDGSSSILSTNNATFQNTG
 TYRCTEPGDPLGGSAAIHLYVKDPPARPWNVLAQEVVVFEDQDALLPCLLTDPVLEAGVSLV
 RVRGRPLMRHTNYSFSPWHGFTIHRAKFIQSQDYQCSALMGGRKVMSISIRLKVQKVIPGP
 PALTLVPAELVRIRGEAAQIVCSASSVDVNFDVFLQHNNNTKLAIPQQSDFHNNRYQKVLTL
 30 NLDQVDFQHAGNYSCVASNVQKGHSTSMFFRVV

Amino acid sequence for CSF-1R SEQ ID NO: 13

MRHTNYSFSPWHGFTIHRAKFIQSQDYQCSALMGGRKVMSISIRLKVQK

35 Amino acid sequence for CSF-1R SEQ ID NO:14 (SNP V32G, A245S, H247P, V279M, position underlined)

IPVIEPSVPELVVKPGATVTLRCVGNNGSVEWDGPPSPHWTLYSDGSSSILSTNNATFQNTG
 TYRCTEPGDPLGGSAAIHLYVKDPPARPWNVLAQEVVVFEDQDALLPCLLTDPVLEAGVSLV
 RVRGRPLMRHTNYSFSPWHGFTIHRAKFIQSQDYQCSALMGGRKVMSISIRLKVQKVIPGP
 PALTLVPAELVRIRGEAAQIVCSASSVDVNFDVFLQHNNNTKLAAIHQQSDFHNNRYQKVLTL
 40 NLDQVDFQHAGNYSCVANSVQKGHSTSMFFRVVESAYLNLSSSEQNLIQEVTVGEGNLKVM
 VEAYPGLQGFNWTYLGPFSDHQPEPKLANATTKDTYRHTFTLSLPR LKPSEAGRYSFLARN
 PGGWRALTFELTLRYPPEVSVIWF INGSGTLLCAASGYQPQNVTLQCSGHTDR CDEAQV
 LQVWDDPYPEVLSQEPFHKVTVQSLLTVETLEHNQTYECRAHNSVSGSGSWAFIPISAGAHT
 HPPDE

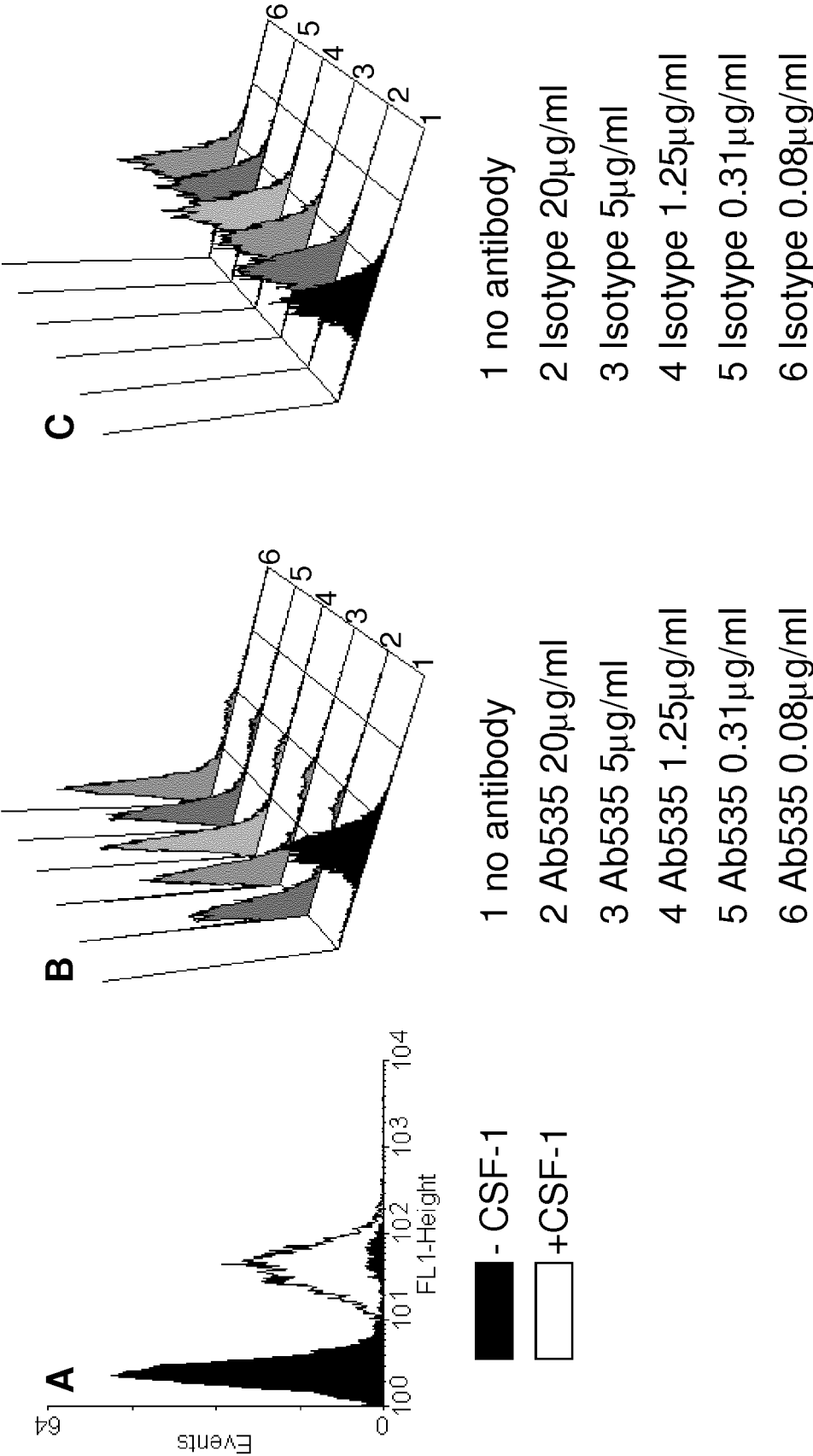
45

FIGURE 2**SEQ ID NO: 15**

5 MGPGLLLLLL VATAWHGQGI PVIEPSVPEL VVKPGATVTL RCVGNNGSVEW DGPPSPHWTL
YSDGSSSILS TNNATFQNTG TYRCTEPGDP LGGSAAIHLY VKDPAFPWNV LAQEVVVFED
QDALLPCLLT DPVLEAGVSL VRVRGRPLMR HTNYSFSPWH GFTIHRAKFI QSQDYQCSAL
MGGRKVMSSIS IRLKVQKVIP GPPALTLVPA ELVRIRGEAA QIVCSASSVD VNFDFVFLQHN
NTKLAIPQQS DFHNNRYQKV LTLNLDQVDF QHAGNYSCVA SNVQKGHSTS MFFRVVESAY
10 LNLSSSEQNLI QEVTVGEGLN LKVMVEAYPG LQGFNWTYLG PFSDHQPEPK LANATTKDTY
RHTFTLSLPR LKPSEAGRYS FLARNPGGWR ALTFELTLRY PPEVSVIWF INGSGTLLCA
ASGYPPQPNVT WLQCSGHTDR CDEAQVLQVW DDPYPEVLSQ EPFHKVTVQS LLTVETLEHN
QTYECRAHNS VGSGSWAFIP ISAGATHPP DE

15

Figure 3



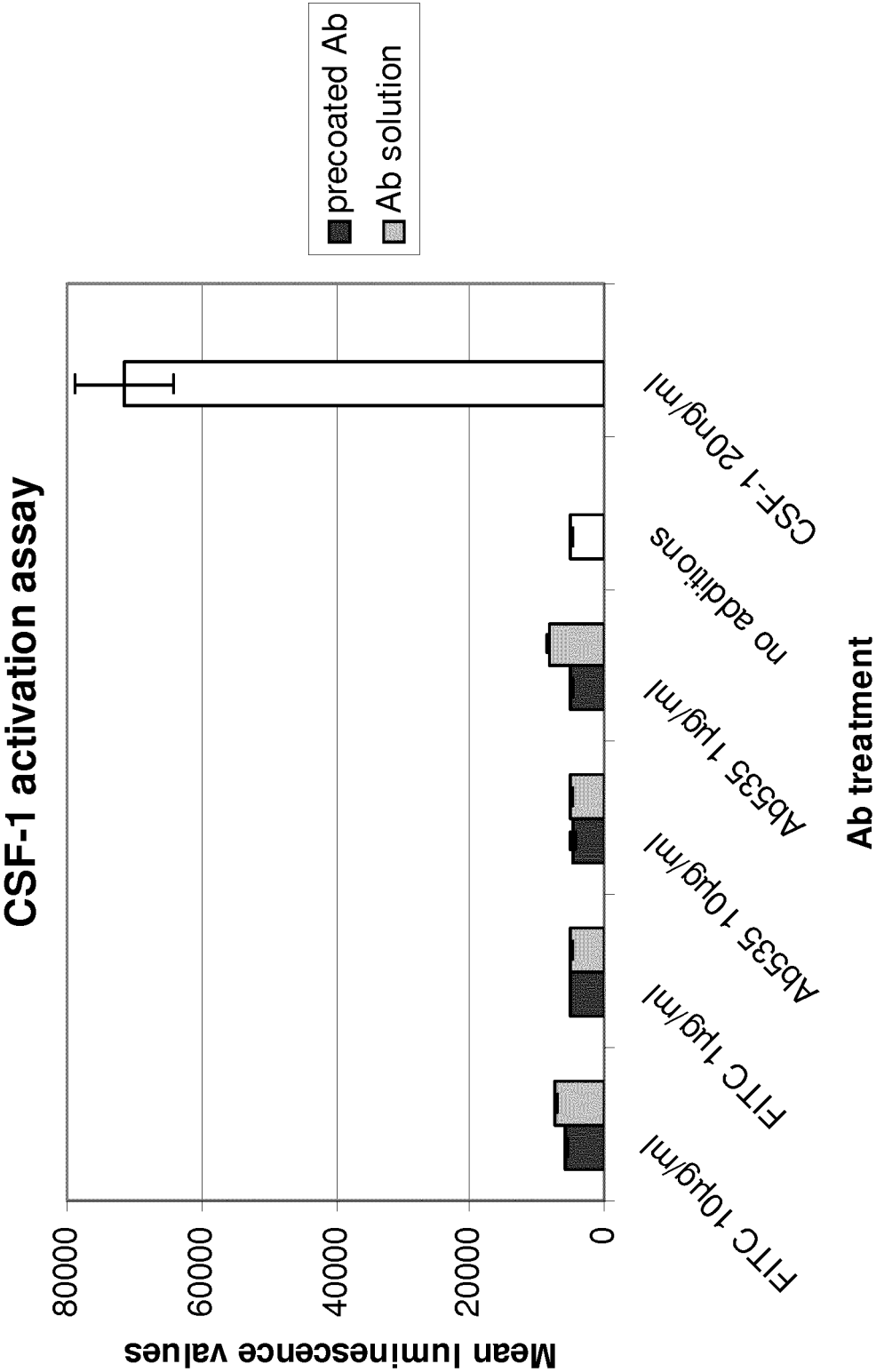


Figure 4

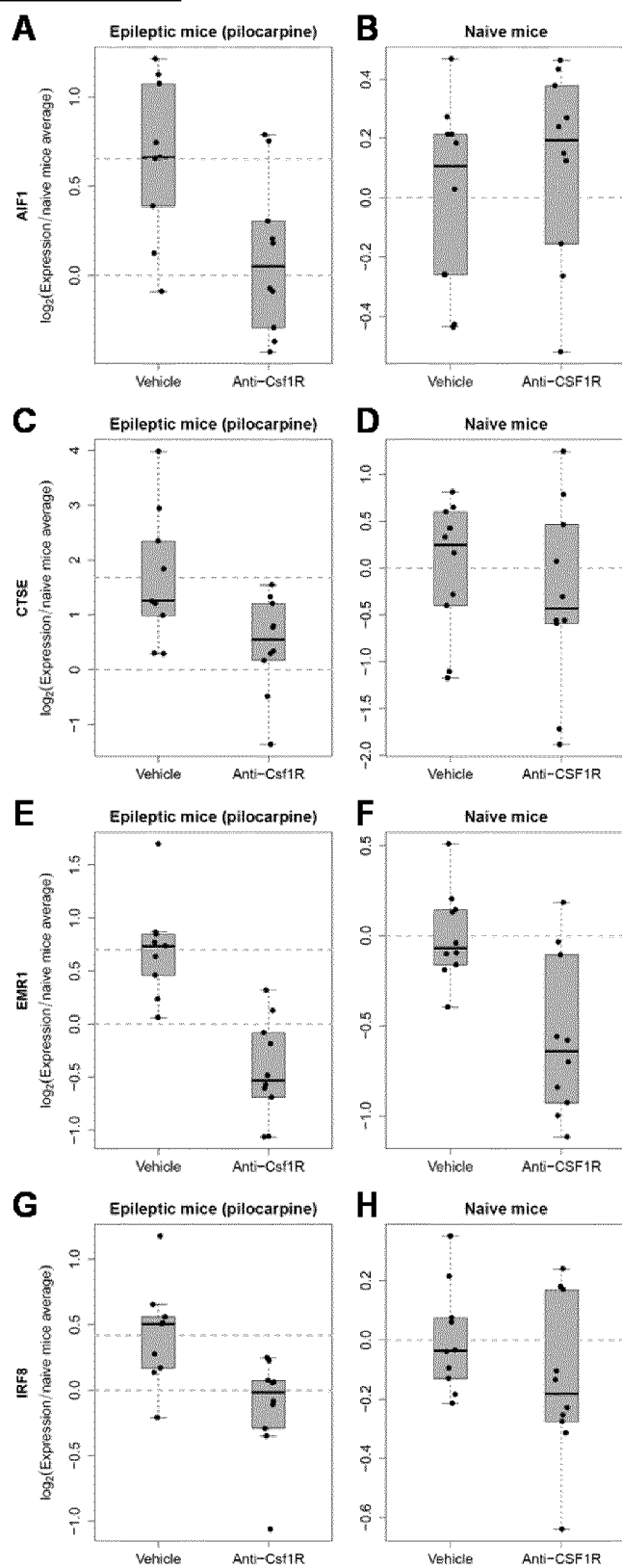
Figure 5

Figure 6

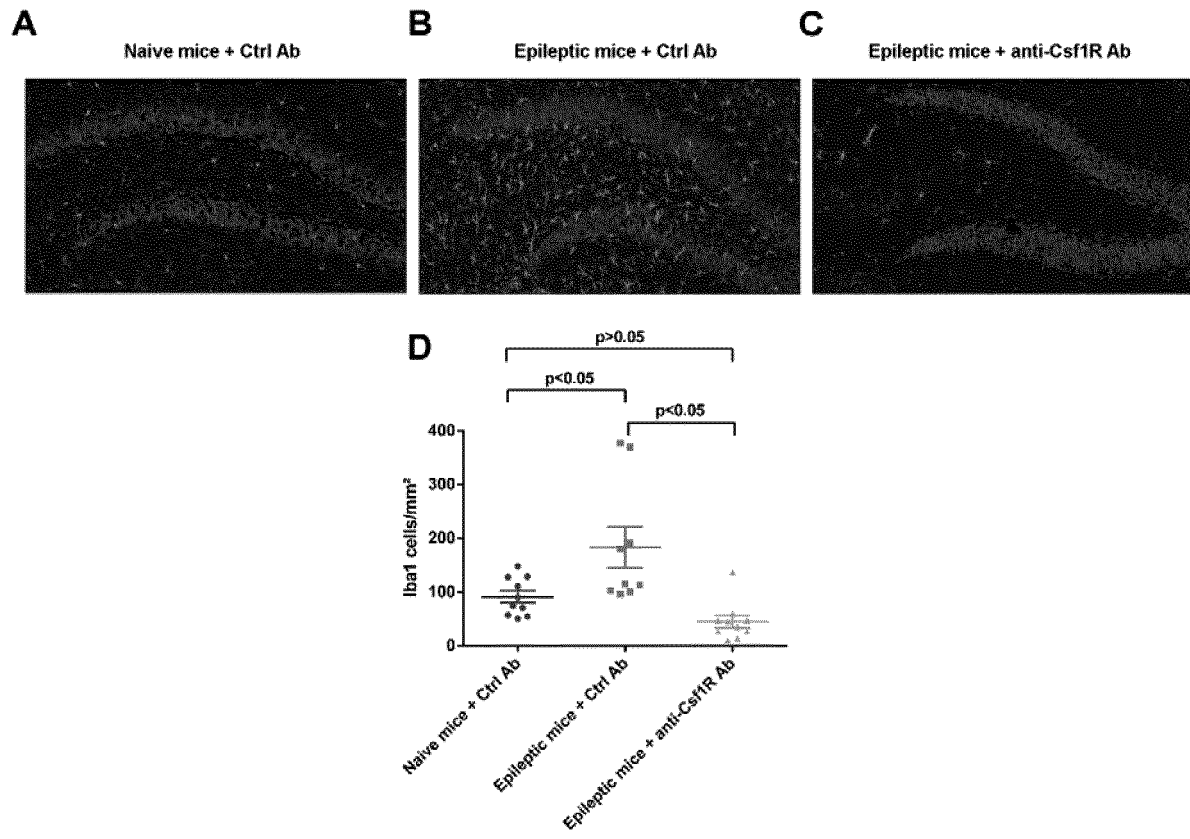


Figure 7