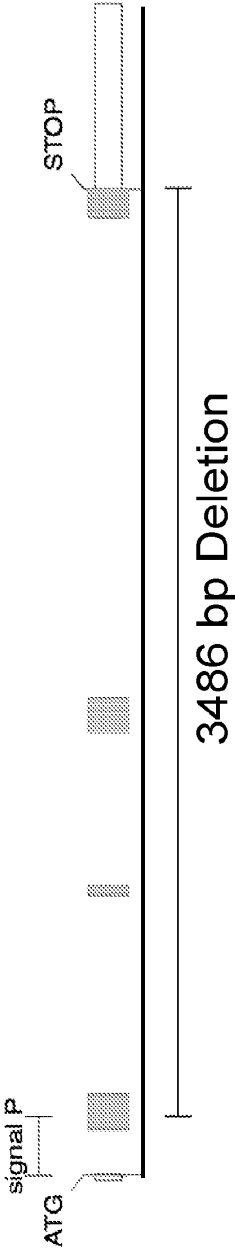


Mouse *Ts/p*



Human *TSLP*

4100 bp Humanization

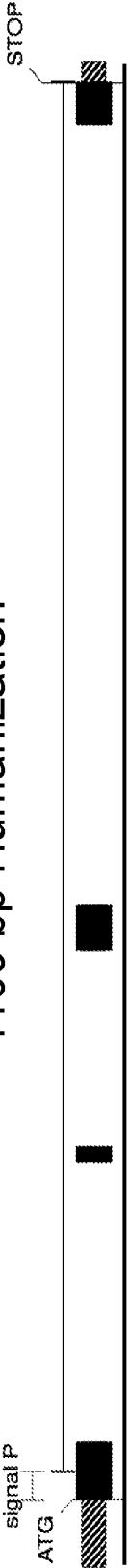


FIG. 1A

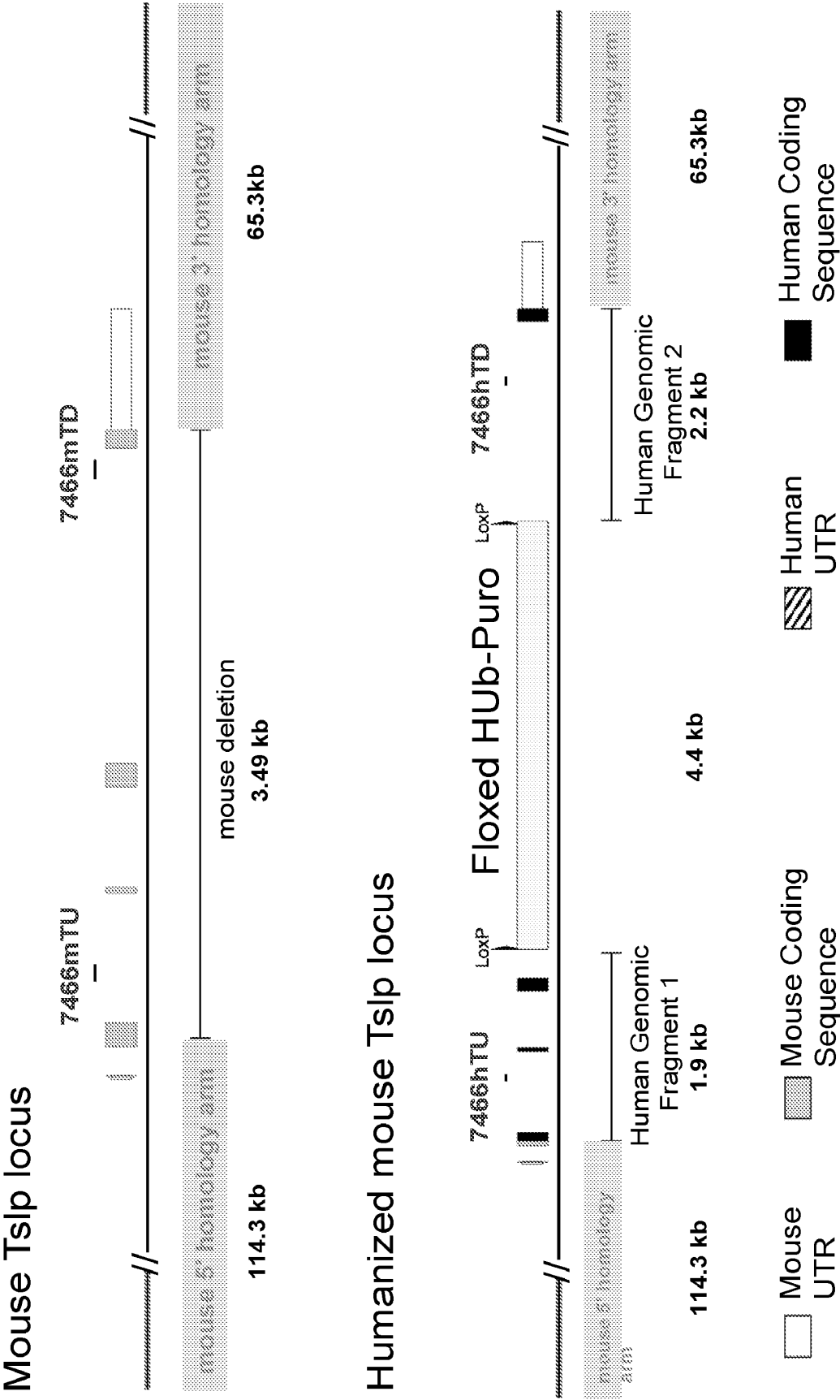
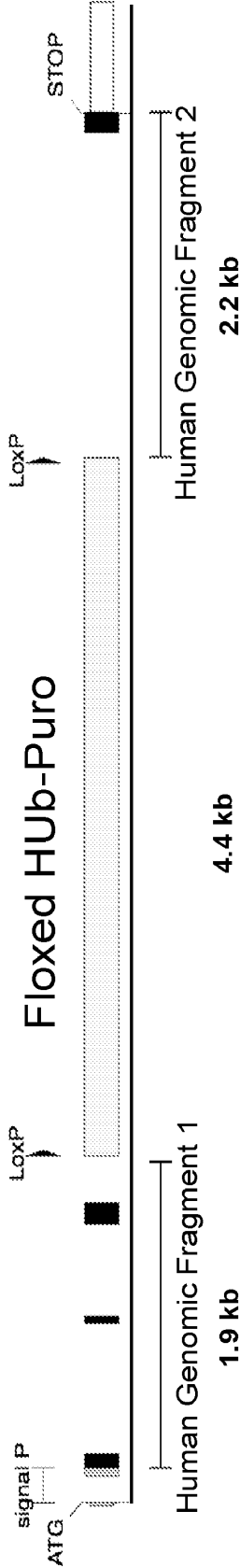


FIG. 1B

Targeted Allele MAID# 7466



Targeted Allele, Cassette Removed MAID# 7467

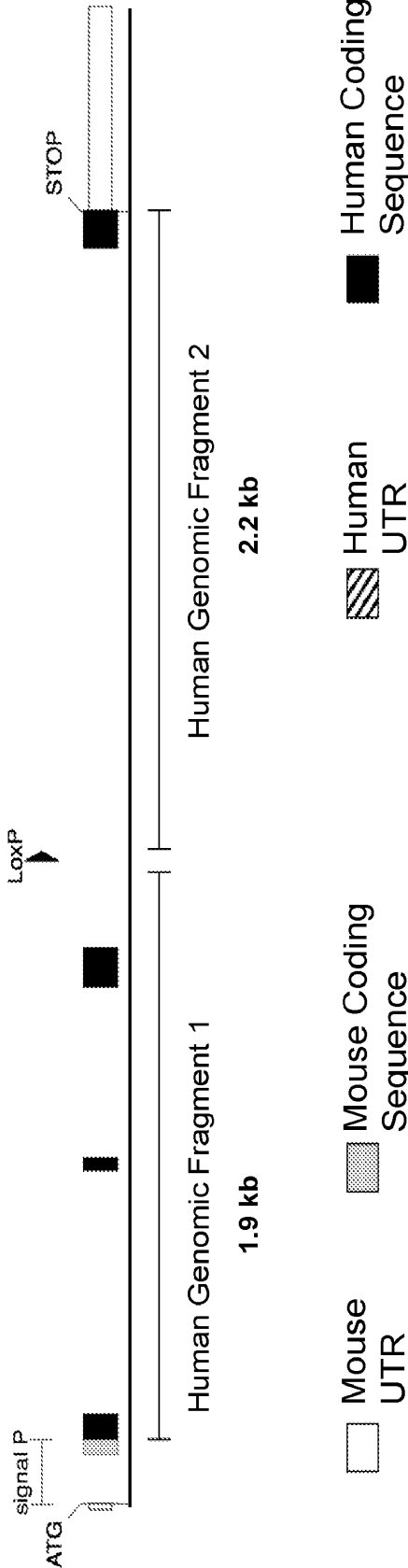


FIG. 1C

Mouse Tslp protein (NP_067342):Signal Peptide: 1-19

MVLLRSLFILQVLVRMGLTYNFSNCNFTSITKIYCNIIHDLTGDLKGAKFEQIEDCESKPACLLKIEYYTLNPIP
GCPSLPDKTFARRTREALNDHCPGYPETERNDGTQEMAQEVQNICLNQTSQILRLWYSFMQSPE (SEQ
ID NO: 1)

Human TSLP protein (NP_149024):Signal Peptide: 1-28

MFPPFALLYVLSVSFRKIFILQLVGLVLTYYDFTNCDFEKIKAAYLSTISKDLITYMSGTKSTEFNNTVSCSNRPH
CLTEIQSLTFNPTAGCASLAKEMFAMKTKAALAIWCPGYSETQINATQAMKKRRKRKVTTNKCLEQVSQ
QGLWRRFRNRPLLKQQ (SEQ ID NO: 3)

Mouse/Human Hybrid protein:Signal Peptide: 1-19

MVLLRSLFILQVLVRMGLTYDFTNCDFEKIKAAYLSTISKDLITYMSGTKSTEFNNTVSCSNRPHCLTEIQSLT
FNPTAGCASLAKEMFAMKTKAALAIWCPGYSETQINATQAMKKRRKRKVTTNKCLEQVSQGLWRRF
NRPLLKQQ (SEQ ID NO: 5)

FIG. 1D

Mouse Tslp mRNA (NM_021367) (CDS):

Signal Peptide: 1-57

ATGGTTCCTCTCAGGAGCCCTCTTCATCCIGCAAGTACTAGTACGGATGGGGCTAACTTACAACCTTTTCTCTAA
CTGCAACTTCACGTCAATTACGAAATATATTGTACATAATTTTTCATGACCTGACTGGAGATTTGAAAGG
GGCTAAGTTCGAGCAAAATCGAGGACTGTGAGAGCAAGCCAGCTTGCTCCTGAAATCGAGTACTATACT
CTCAATCCTATCCCTGGCTGCCCTTCACTCCCGACAAACATTTGCCCGGAGAACAAAGAGAGCCCTCA
ATGACCACTGCCAGGCTACCCCTGAAACTGAGAGAAATGACGGTACTCAGGAAATGGCACAAGAAAGTCC
AAACATCTGCCTGAATCAAACCTCACAAATCTAAGATTGTGGTATTCCTTCATGCAATCTCCAGAATAA
(SEQ ID NO: 2)

Human TSLP mRNA (NM_033035) (CDS):

Signal Peptide: 1-84

ATGTTCCCTTTTGGCCCTTACTATATGTTCTGTGCTAGTTTCTTTTCAGGAAATCTTCAATCTTACAACCTTGTAGGG
CTGGTGTTAACTTACGACCTTCACTAACTGTGACTTTGAGAAGATTAAAGCAGCCCTATCTCAGTACTATTT
CTAAAGACCTGATTACATATATGAGTGGGACCCAAAGTACCGAGTTCAACAACACCGTCTCTTTGTAGCA
ATCGGCCACATTGCCCTTACTGAAATCCAGAGCCTAACCTTCAATCCACCGCGGCTGCGCGTCGCTC
GCCAAAGAAATGTTCCGCCATGAAAACTAAGGCTGCCCTTAGCTATCTGGTGCCCAAGGCTATTCGGAAACT
CAGATAAATGCTACTCAGGCAATGAAGAAGAGGAGAAAGGAAAGTCACAACCAATAAATGTCTGGA
ACAAGTGTCACAATTACAAAGGATTGTGGCGTCGCTTCAATCGACCTTTTACTGTGAACAACACAGTAA (SEQ
ID NO: 4)

Mouse/Human Hybrid mRNA (CDS):

ATGGTTCCTCTCAGGAGCCCTCTTCATCCTGCAAGTACTAGTACGGATGGGGCTAACTTACGACTTCACTAA
CTGTGACTTTTGAGAAAGATTAAAGCAGCCCTATCTCAGTACTATTTCTAAAGACCTGATTACATATATGAGTGG
GACCAAAAGTACCGAGTTCAACAACACCGTCTCTTTGTAGCAATCGGCCACATTGCCCTTACTGAAATCCAG
AGCCTAACCTTCAATCCACCGCGGCTGCGGCTCGCTCGCCAAAGAAATGTTCCGCATGAAACTAAG
GCTGCCCTTAGCTATCTGGTGCCCAAGGCTATTCGGAAACTCAGATAAATGCTACTCAGGCAATGAAGAAGA
GGAGAAAAAGGAAAGTCACAACCAATAAATGTCTGGAACAAGTGTCAACAATTACAAGGATTGTGGCGTC
GCTTCAATCGACCTTTTACTGTGAACAACACAGTAA (SEQ ID NO: 6)

FIG. 1E

Human/mouse Tslp protein alignment

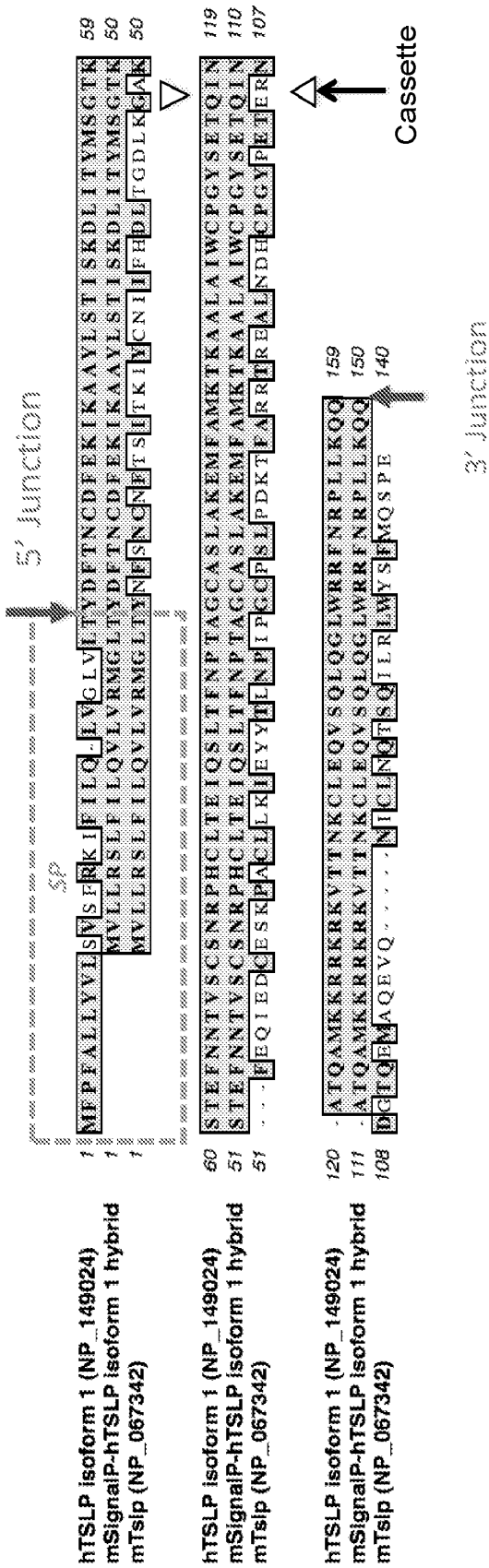


FIG. 1F

hTSLP levels

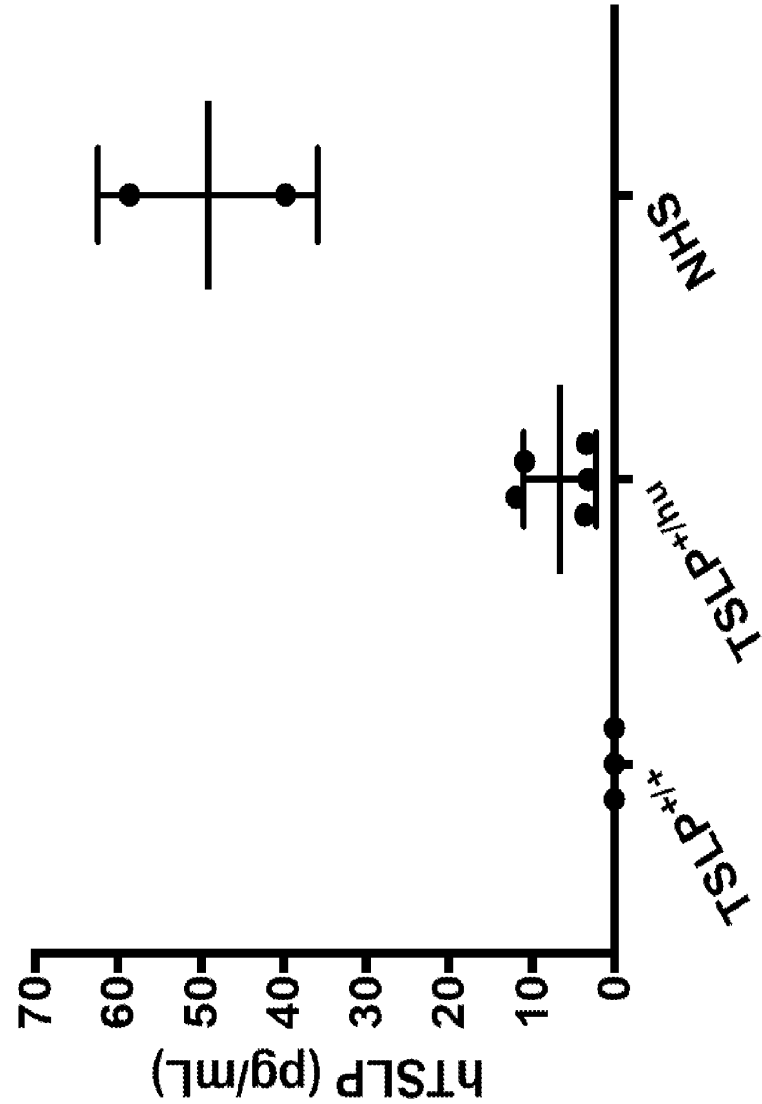
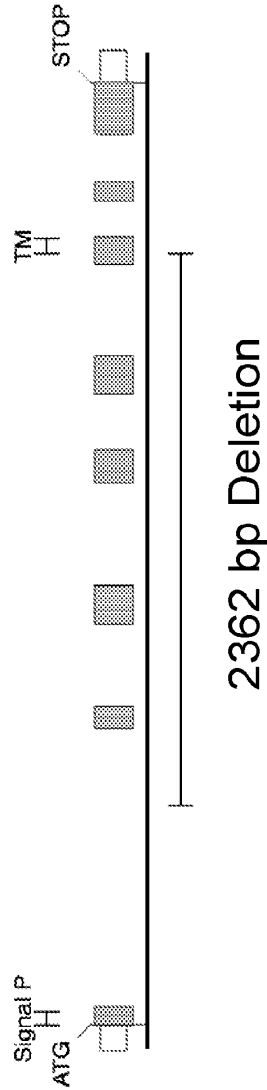


FIG. 1G

Mouse *Ts/pr*



Human *TSLPR*

13743 bp Humanization

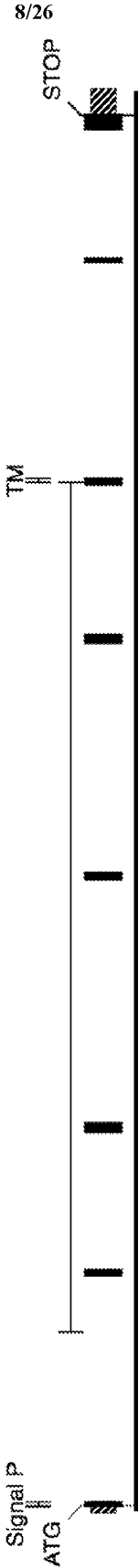


FIG. 2A

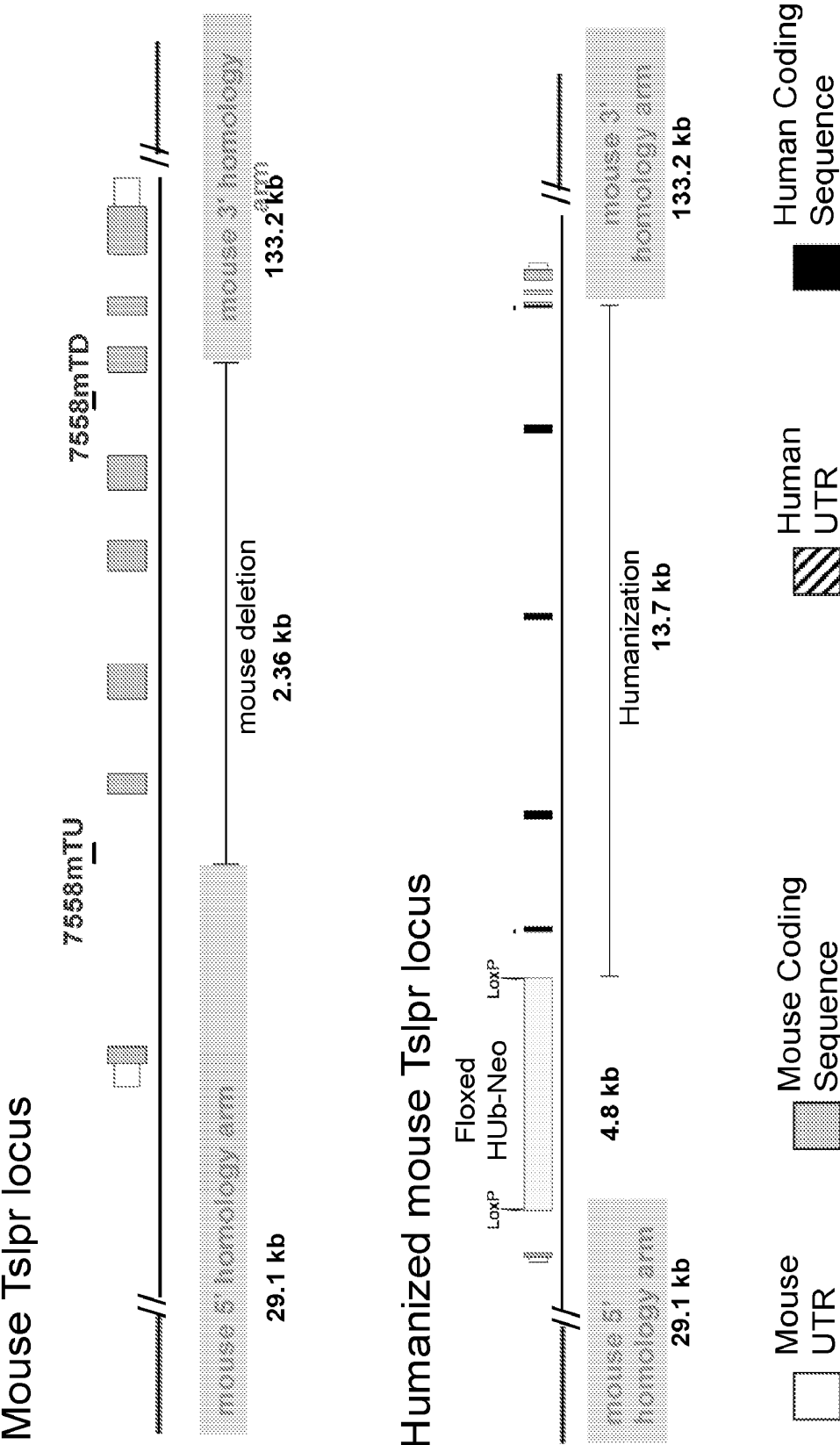
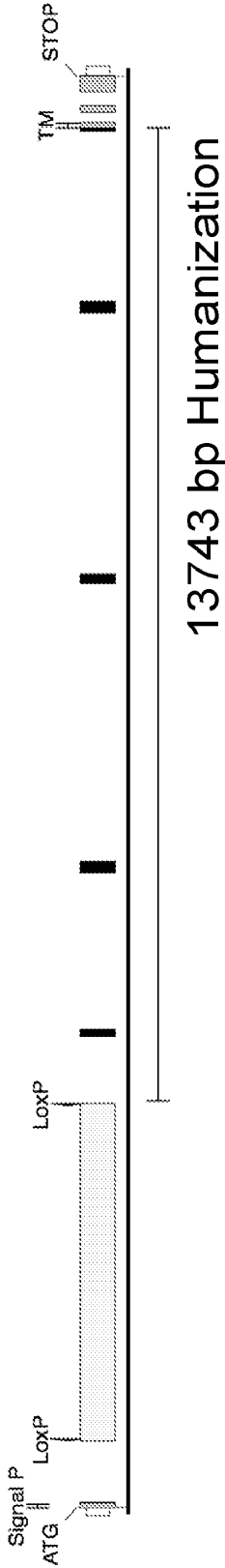


FIG. 2B

Targeted Allele MAID# 7558



Targeted Allele, Cassette Removed MAID# 7559

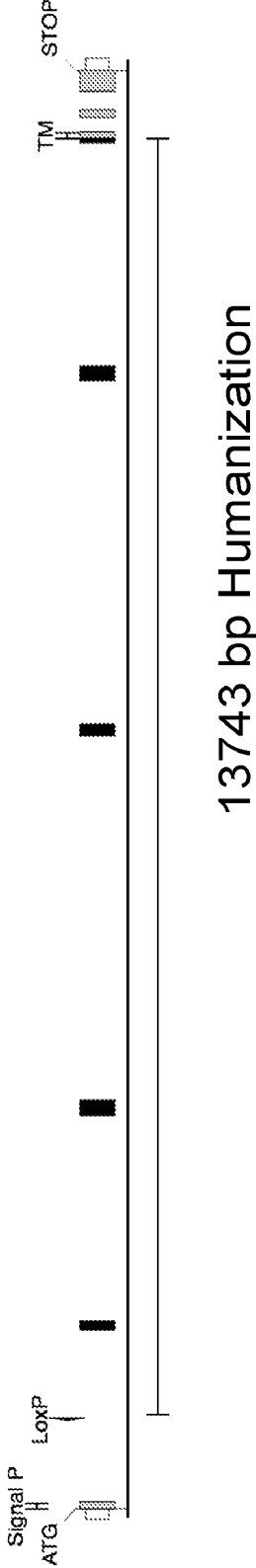


FIG. 2C

Mouse Tslpr protein (NP_001158207):
Signal Peptide: 1-19
TM: 244-264
MAWALAVILLPRLLAAAAAAAVTSRGDVTWCHDLETVEVTWGSGPDHHGANLSLEFRYGTGALQPCPRYF
LSGAGVTSGCILPAARAGLLELRDGGGAMVFKARQASAWLKPRPPWNVTLTWTPDGDVTSWPAHSYL
GLDYEYQHRSENDDAWQTTSGPCDLTVGGLDPVRCYDFRVRASPRAAHYGLEAQPSWTAVTRLSGA
ASAGDPCA AHLPLASCTASPA SPALAPPLPLGCGLAALLTSLLLAALRLRRVKDALLPCVPDPGSGSFPG
FEKHGNGFQAWIADAQATAPPARTEEEEDLIHTKAKRVEPEDGTSLCTVPRPPSFEPGPGGGAMVSVGGA
TFMVGDSGYMTL (SEQ ID NO: 21)

Human TSLPR protein (NP_071431):
Signal Peptide: 1-22
TM: 232-252
MGRLVLLWGAAVFLGGWMALGQGGAAEGVQIQIYFNLETVQVTWNASKYSRTNLTfHYRfNGDEAYDQ
CTNYLLQEGHTSGCLLDAEQRDDILYFSIRNGTHPVFTASRWMVYLYKPSSPKHVRFSWHQDAVTVTCSDL
SYGDLLEYEQYRSPFDTEWQSKQENTCNVTIEGLDAEKCYSFWRVKAMEDVYGPDTPSDWSEVTCWQ
RGEIRDACAETPTPPKPKLSKFILISSLAILLMVSLLSLWKLWRVKFLIPSVDPKSIFFPGLFEIHQGNFQE
WITDTQNVVAHLHKMAGAEQESGPEEPLVVQLAKTEAESPRMLDPQTEEKEASGGSLQLPHQPLQGGDW
TIGGFTFVMNDRSYVAL (SEQ ID NO: 23)

Mouse/Human Hybrid protein:
Signal Peptide: 1-19
TM: 232-252
MAWALAVILLPRLLAAAAAAAVTSRAEGVQIQIYFNLETVQVTWNASKYSRTNLTfHYRfNGDEAYDQCT
NYLLQEGHTSGCLLDAEQRDDILYFSIRNGTHPVFTASRWMVYLYKPSSPKHVRFSWHQDAVTVTCSDL
YGDLLYEYQYRSPFDTEWQSKQENTCNVTIEGLDAEKCYSFWRVKAMEDVYGPDTPSDWSEVTCWQ
RGEIRDACAETPTPPKPKLSKLLPLGCGLAALLTSLLLAALRLRRVKDALLPCVPDPGSGSFPGLEKHHGN
FQAWIADAQATAPPARTEEEEDLIHTKAKRVEPEDGTSLCTVPRPPSFEPGPGGGAMVSVGGATFMVGD
SGYMTL (SEQ ID NO: 25)

FIG. 2D

Mouse Tslpr mRNA (NM_001164735) (CDS):Signal Peptide: 1-57TM: 730-792

ATGGCATGGGCACCTCGCGGTCACTCCTTCCTCGGCTCCTTGCGGGGCGACGCGCGGCGGCGGTGACGTACGTCACGGGGTG
 ATGTCACAGTCGTCTGCCATGACCTGAGACGGTGAGGTACAGTGGGGCTGGGCCCGGACCCACGACGGCGCAACTTGAGC
 CTGGAGTTCCGTTATGGCACTGGCGCCCTGCAACCCCTGCCCGCATATTTCTGTCCGCGCTGGTCACTTCGGGTGCATC
 CTCGCCGGCGAGGGCGGGCTGCTGGAGCTGGCACTGGCGACGGAGGGGGGCCATGGTGTAAAGGCTAGCAGCGC
 GCGTCCGCTGGCTGAAGCCCGCCACCTTGGAATGTGACCTGCTCTGGACACACGACGGGACGTGACTGTCTCCTGGCC
 TGCCCACTCCTACCTGGCCTGGAATACTAGAGTGCAGACCCGGAGAGCAATGACGATGAGGACGCCCTGGCAGACGACCTCAG
 GGCCCTGCTGTGACTTGACAGTGGCGGGCTCGACCCCGTACGCTGCTATGACTTCGGGTTCCGGGCTCGCCCCGGCCGC
 GCACATGGCCTGGAGGCGCAGCCTAGCGAGTGGACAGCGGTGACAAGGCTTTCGGGGCAGCATCCGCGGTTGACCCCTGC
 GCGGCCACCTTCGCCCTTAGCCTCCTGTACCGCAAGCCCGCCCATCCCGGCCCTGGCCCCGCTCCTGCGCCCTGGG
 CTGCGGCTAGCAGCGCTGCTGACACTGTCCCTGCTGCGCGCCCTGAGGCTTCGACGGGTGAAAGATCGCTGCTGCCCT
 GCGTCCCTGACCCAGCGGCTCCTTCCCTGGAATCTTTGAGAAAGCATCACGGAACTTCAGGCTGGATTGCGGACGCCCAGG
 CCACAGCCCGCCAGCCAGGACCGAGGAGAAATGACCTCATCCACACCAAGGCTAAGAGGGTGAGCCCGGAGGACGGCAC
 CTCCTCTGCAACCGTGCCAAAGGCCACCCAGCTTCGAGCCAAAGGGCGCGGAGGCCGGGCCATGGTGTCAAGTGGCGGGGCC
 ACGTTTCATGGTGGCGACAGCGGCTACATGACCCCTGTGA (SEQ ID NO: 22)

Human TSLPR mRNA (NM_022148) (CDS):Signal Peptide: 1-66TM: 694-756

ATGGGGCGGCTGGTTCTGCTGTGGGGAGCTGCCGCTCTTCTGCTGGGAGGCTGGATGGCTTTGGGGCAAGGAGGAGCAGCAGA
 AGGAGTACAGATTTCAGATCATCTACTTCAATTTAGAAACCGTGCAGGTGACATGGAAATGCCAGCAAACTATCCAGGACCAACCT
 GACTTTCCACTACAGATTCAACGGTGATGAGGCCTATGACCAAGTGCAACCACTACCTTCTCCAGGAAGGTCACTTCGGGGTG
 CCTCTAGACGCAGAGCAGCAGACGACATCTCTATTTCTCCATCAGGAATGGGACGCCACCCGTTTTCAACCGCAAGTCGCTG
 GATGGTTTATTACCTGAACCCAGTTCCCGGAAGCACCGTGAGATTTTCGTGGCATCAGGATGCAGTGACGGTGACGTGTTCTGA
 CCTGTCTACGGGATCTCCTCTATGAGTTTCAGTACCGGAGCCCTTCGACACCCGAGTGGCAGTCCAAACAGGAAATACCTG
 CAACGTACCATAGAAAGGCTTGATGCCGAGAAGTTACTCTTCTGGGTACGGGTGAAGGCTATGGAGGATGATATGGGCC
 AGACACATACCCAAAGCGACTGGTCAGAGGTGACATGCTGGCAGAGAGGCGAGATTCGGGATGCCCTGTGCAGAGACACCAACG
 CCTCCAAACCAAGCTGTCCAAATTTATTTTAAATTTTCAGCTGGCCATCCTTCGATGGTGCTCTCCTCTCTGCTTTATG
 GAAATATGGAGGTGAGAAAGTTTCTCATTTCCAGCGTGCCAGACCCGAAATCCATCTTCCCCGGGCTCTTTGAGATACACCA
 AGGGAATTCAGAGTGGATCACAGACACCCAGAACGTGGCCACCTCCACAAAGATGGCAGGTGCAGAGCAAGAAAGTGGC
 CCCGAGGAGCCCTGTGATGCCAGTTGGCCAAAGACTGAAGCCGAGTCTCCAGGATGCTGGACCCACAGACCGAGGAGAAAG
 AGGCCTCTGGGGGATCCCTCCAGCTTCCCCACCAAGCCCTCCAAAGGCGGTGATGTGTTCAATCGGGGGCTTCACCTTTGTG
 ATGAATGACCCGCTCCTACGTGGCGTTGTGA (SEQ ID NO: 24)

FIG. 2E

Mouse/Human Hybrid mRNA (CDS):

Signal Peptide: 1-57

TM: 694-756

ATGGCAI GGGCACTCGGGTCATCCTCCCTGCCI GGGCTCCTTGGCGGGG CAGCGGGCGGGGTGACGTCA CGGGCA
GAAGGAGTACAGATT CAGATCATCTACTTCAATTTAGAAACCGTG CAGGTGACATGGAATGCCAGCAAA TACTCCAGGACCA
ACCTGACTTTCCACTACAGATTCAACGGTGATGAGGCCCTATGAC CAGTGACCAACTACCTTCTCCAGGAAGGTCA CACTTC
GGGTGCCCTCCTAGACG CAGAGCAGCGAGACGACATTCTCTATTTCTCATCAGGAATGGGACGCACCCCGTTTTCA CCGCA
AGTCGCTGGATGGTTTATTACCTGAAACCCAGTTC CCGAAGCACGTGAGATTTTCGTGGCATCAGGATGCAGTGACGGTGA
CGTGTCTGACCTGTCTACGGGGATCTCCTCTATGAGGTT CAGTACCGGAGCCCTTCGACACCCGAGTGGCAGTCCAAACA
GGAATAATACCTGCAACGTCA CCAATAGAAAGCTTGGA TGCCGAGAA GTTACTCTTTCTGGGT CAGGGTGAAGGCTATGGAG
GATGTATATGGGCCAGACACATACCCAAGCGACTGGTCA GAGGTGACATGCTGGCAGAGAGGCGAGATTCCGGGATGCCTGT
GCAGAGACACCAACGCTCCCAAACCAAGCTGTCCAACICCTG CCCCCTAGCGGCTGCGCTGACACTG
TCCCTGCTCCTGGCCGCCCTGAGGCTTCG CAGGGTGAAAGATGCGCTGCTGCCCTGCGTCCC TGACCC CAGCGGCTCCTTCC
CTGGACTCTTTGAGAA GCATCACGGGA ACTTCCAGGCCTGGATTGCGGACGCC CAGGCCACAGCCCCGCC CAGGACCGGA
GGAGGAAGATGACCTCATCCACACCAAGGCTAAGAGGGTGGAGCCCGAGGACGGCACCTCCCCTCTGCACCCGTGCCAAGGCCA
CCCAGCTTCGAGCCCAAGGGGCCCGGAGGCGGGGCCCATGGTGT CAGTGGCGGGGCCACGTT CATGGTGGCGGACACGCGG
CTACATGACCCCTGTGA (SEQ ID NO: 26)

FIG. 2E (Continued)

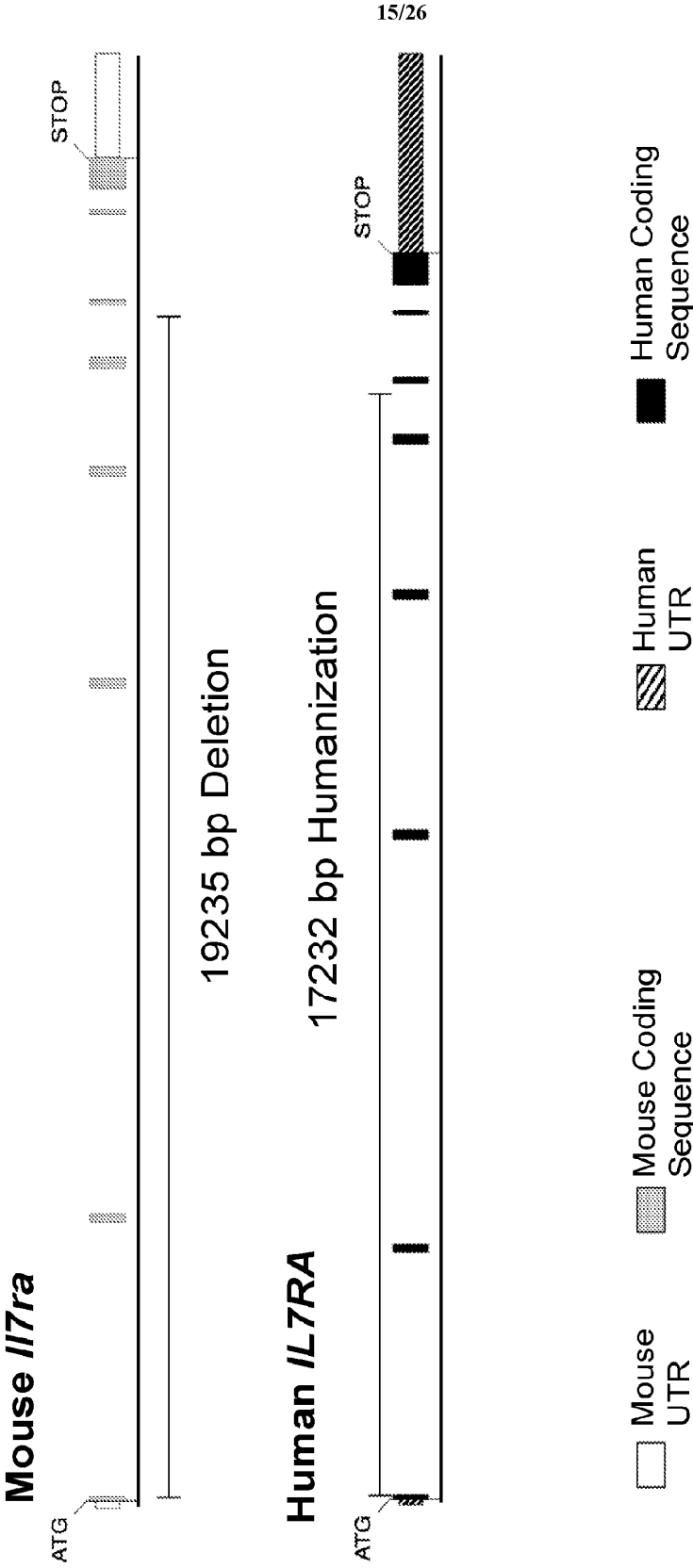


FIG. 3A

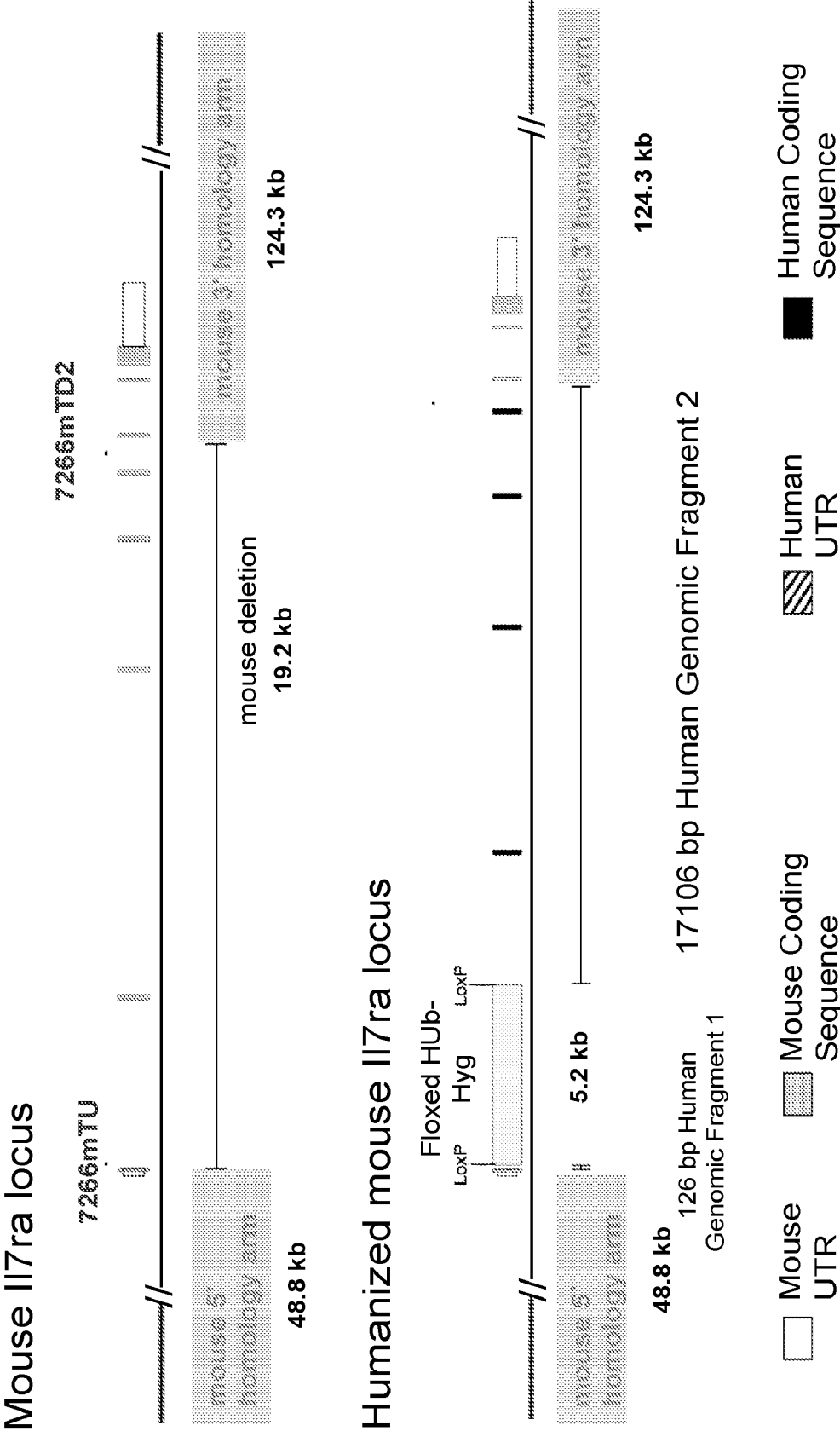
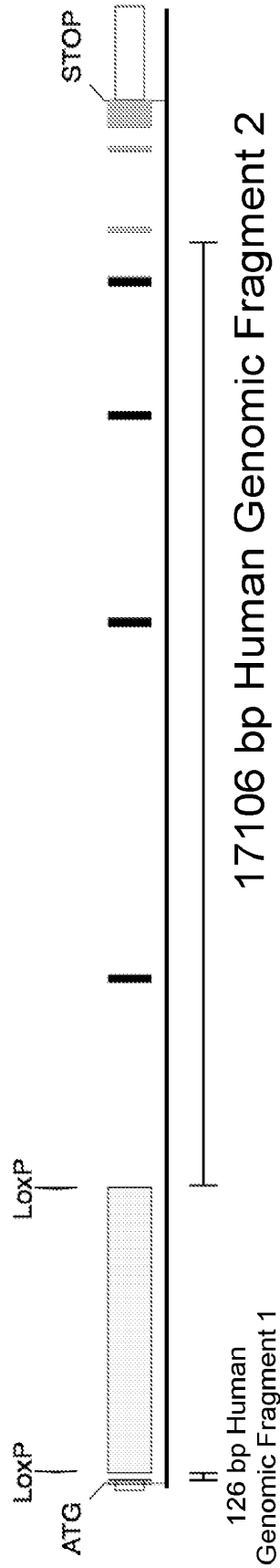


FIG. 3B

Targeted Allele MAID# 7266



Targeted Allele, Cassette Removed MAID# 7267



FIG. 3C

Mouse IL7ra protein (NP_032398):

MMALGRAFAIVFCLIQAVSGESGNAQDGDLEDADADHSHFWCHSQLEVDGSQHLLTCAFNDSDINTANLEF
QICGALLRVKCLTNKLDIYFIKTSEFLIGSSNICVKLGQKNLTCKNMAINTIVKAEAPSDLKVVYRKEANDF
LVTFNAPHLKKKYLKKVKHVDVAYRPARGESNWTHVSLFHTRTTIPQRKLRPKAMYEIKVRSIPHNDYFKGFW
SEWSPSTFETPEPKNQGGWDPVLPSTILSLFSVFLVLAHVLWKKRIKPVWVWPSLPDHHKKTLEQLCKKP
KTSLNVSNPESFLDCQIHEVKGVGEARDEVESFLPNDLPAQPEELETQGHRAAVHSANRSPETSVPETV
RRESPLRCLARNLSTCNAPLLSSRSPDYRDGDRNRPPVYQDLLPNSGNTNVPVPVQPPLPFQSGILIPVS
QRQPISTSSVLNQEEAYVTMSSFYQNK (SEQ ID NO: 41)

Human IL7RA protein (NP_002176):

MTILGTTFGMVFSLLQVWSGESGYAQNGDLEDAELDDYSFSCYSQLEVNGSQHSLTCAFEDPDVNITNLE
FEICGALVEVKCLNFRKLQEIFYFIETKKFLIGKSNICVKGEKSLTCKKIDLTIVKPEAPFDLSVYREGAN
DFVVTNTSHLQKKYVKVLMHVDVAYRQEKDENKWTNVNLSSTKLTLQRKLQPAAMYEIKVRSIPDHYFK
GFWSEWSPSYFRTPEINNSSGEMDPILLTISILSFFSVALLVILACVLWKKRIKPIVWPSLPDHHKKTLEHLC
KKPRKNLNVSNPESFLDCQIHRVDDIQAARDEVEGFLQDTFPQQLEESEKQRLGGDVQSPNCPSEDWIT
PESFGRDSSLTCLAGNVSACDAPILSSRSRLDCRESGKNQPHVYQDLLLSLGTNTSTLPPPFSLQSGILT
NPVAQGGQPILTSLGSNQEEAYVTMSSFYQNQ (SEQ ID NO: 43)

Mouse/Human Hybrid protein:

MMALGRAFAIVFCLIQAVSGESGYAQNGDLEDAELDDYSFSCYSQLEVNGSQHSLTCAFEDPDVNITNL
EFEICGALVEVKCLNFRKLQEIFYFIETKKFLIGKSNICVKGEKSLTCKKIDLTIVKPEAPFDLSVYRE
GANDFWVTNTSHLQKKYVKVLMHVDVAYRQEKDENKWTNVNLSSTKLTLQRKLQPAAMYEIKVRSIP
DHYFKGFWSEWSPSYFRTPEINNSSGGWDPVLPSTILSLFSVFLVLAHVLWKKRIKPVWVWPSLPDH
KKTLEQLCKKPKTSLNVSNPESFLDCQIHEVKGVGEARDEVESFLPNDLPAQPEELETQGHRAAVHSANR
SPETSVPETVRRESPLRCLARNLSTCNAPLLSSRSPDYRDGDRNRPPVYQDLLPNSGNTNVPVPVP
QPLPFQSGILIPVSQRQPISTSSVLNQEEAYVTMSSFYQNK (SEQ ID NO: 45)

FIG. 3D

Human IL7RA mRNA (NM_002185) (CDS):

ATGACAAATTCAGGTACAACCTTTTGGCATGGTTTTCTTTACTTCAAGTCGTTTTCTGGAGAAAAGTGGCTATGCTCAAAATGGAG
ACTTGGGAAGATGCAGAACTGGATGACTACTCATCTCATCTATAGCCAGTTGGAAAGTGAATGGATCGCAGCACTCACTGACCC
TGTGCTTTTGGGACCCAGATGCAACATCACCAATCTGGAATTTGAATATGTGGGCCCTCGTGGAGGTAAGATGCCCTGAA
TTTCAGGAAACTACAAGAGATATTTTCATCGAGACAAAGAAATTTCTTACTGATTGGAAAGAGCAATATATGTGTGAAGGTTGG
AGAAAAGAGCTTAACCTGCAAAAAAATAGACCTAACCACTATAGTTAAACCCTGAGGCCTTTTGACCTGAGTGTGCTCTATC
GGGAAGGAGGCCAATGACTTTGTGGTGACATTTAATACATCACACTTGCAAAAGAAAGTATGTAAGTTTTTAATGCACGATGTA
GCCTACCGCCAGGAAGGATGAAAAACAATGGACGCATGTGAATTTTATCCAGCACAAAGCTGACACTCTCGCAGAGAAAAGC
TCCAACCGGCAGCAATGTATGAGATTAAAGTTTCGATCCCTCGTATCACTATTTTAAAGGCTTCTGGAGTGAATGGAGTCCAA
GTTATTACTTCAGAACTCCAGAGATCAATAATAGTCAAGGAGATGGATCCTATCTTACTAACCATCAGCATTTTGAGTTTTT
CTTGTGCTGCTGTGGTCACTTGGCCTGTGTATGGAAAAAAGGATTAAGCCTATCGTATGGCCAGTCTCCCCGATCA
TAAGAAAGACTCTGGAAACATCTTTGTAAAGAAACCAAGAAAAATTAATGTGAGTTTCAATCTGAAAGTTTCTCGGACTGCCA
GATTCATAGGTGGATGACATTCAGAGTAGAGATGAAGTGGAAAGGTTTTCTGCAAGATCGTTTTCTCAGCAACTAGAAAGAT
CTGAGAAGCAGAGGCTTGGAGGGATGTGCAGAGCCCCCACTGCCCATCTGAGGATGATGTCATCACTCCAGAAAAGCTTTGG
AAGAGATTATCCCTCACATGCCCTGGCTGGGAATGTCAGTGCATGTGACGCCCTTATCTCTCCTCTTCCAGGTCCTTAGACTG
CAGGGAGAGTGGCAAGAAATGGGCTCATGTGTACCAAGGACCTCTGCTTAGCCTTGGGACTACAAACAGCACGCTGCCCCCT
CCATTTTCTCTCCAACTGGAATCCTGACATTGAACCCAGTTGCTCAGGGTCAAGCCCATTTCTTACTTCTCCCTGGGATCAAAATCAA
GAAGAAAGCATATGTCAACCATGTCCAGCTTCTACCAAAACCAAGTGA (SEQ ID NO: 44)

Mouse/Human Hybrid mRNA (CDS):
ATGATGGCTCTGGGTAGAGCTTTCGGCTATAGTTTTCTGCTTAATTCAGCTGTTTTCTGGAGAAAGTGGCTA
TGCTCAAAATGGAGACTTGGAAGATGCAGAACTGGATGACTACTCATTTCTCATGCTATAGCCAGTTGGAAAGTGA
ATGGATCGCAGCACTCACTGACCTGTGCTTTTGAGGACCCAGATGTCAACATCACCAATCTGGAATTTGAAATA
TGTTGGGCCCTCGTGAGGTAAAGTGCCTGAAATTCAGGAAACTACAAGAGATATATTTTCATCGAGACAAAGAA
ATTCTTACTGATTGGAAAGAGCAATATATGTGTGAAGGTTGGAGAAAGAGTCTAACTGCAAAATAATAGACC
TAACCACTATAGTTAAACCTGAGGCTCCTTTTGACCTGAGTGTCTATCGGGAAGGAGCCCAATGACTTTTGTG
GTGACATTTAATACATCACACTTGCAAAAGAAAGTATGTAAAGTTTTAATGCACGATGTAGCTTACCGCCAGGA
AAAGGATGAAAAACAATGGACGCAATGTGAATTTATCCAGCACAAAGCTGACACTCCTGCAGAGAAAGCTCCAA
CCGGCAGCAATGTATGAGATTAAAGTTCGATCCCTGATCACIATTTTAAAGGCTTCTGGAGTGAATGGAGT
CCAAGTTATTACTTCAGAACTCCAGAGATCAATAATAGCTCAGGAGGATGGATCCTGTCTTGCCAAAGTGCACC
ATTCTGAGTTTGTTCTCTGTGTTTTTGTGGTCATCTTAGCCCATGTGCTATGGAAAAAAGGATTAAACCTGTCGT
ATGGCTAGTCTCCCGATCATAGAAAACTCTGGAACAATGTAAAGCCCAAAACGAGTCTGAATGTGAGT
TTCAATCCCGAAAGTTTCTGGACTGCCAGATTCTATGAGGTGAAGGCGTTGAAGCCAGGACGAGGTGGAAAGT
TTTCTGCCCAATGATCTTCTTGCACAGCCAGAGGAGTTGGAGACACAGGACACAGAGCCGCTGTACACAGTGCA
AACCGCTCGCCTGAGACTTCAGTCAGCCCAACAGAAACAGTTAGAAAGAGATCACCTTAAGATGCCTGGCTAGA
AATCTGAGTACCTGCAATGCCCTCCACTCCTTTCTCTAGGTCCTGACTACAGAGATGGTGACAGAAATAGGC
CTCCTGTGTATCAAGACTTGCTGCCAAACTCTGGAAACACAAATGTCCCTGTCCCTCAACCATTGCCCTTT
CCAGTCGGGAATCCTGATACCAGTTTCTCAGAGACAGCCCATCTCCACTTCTCAGTACTGAATCAAGAAAGCGG
TATGTCACCATGTCTAGTTTTTACCAAAACAATGA (SEQ ID NO: 46)

FIG. 3E (Continued)

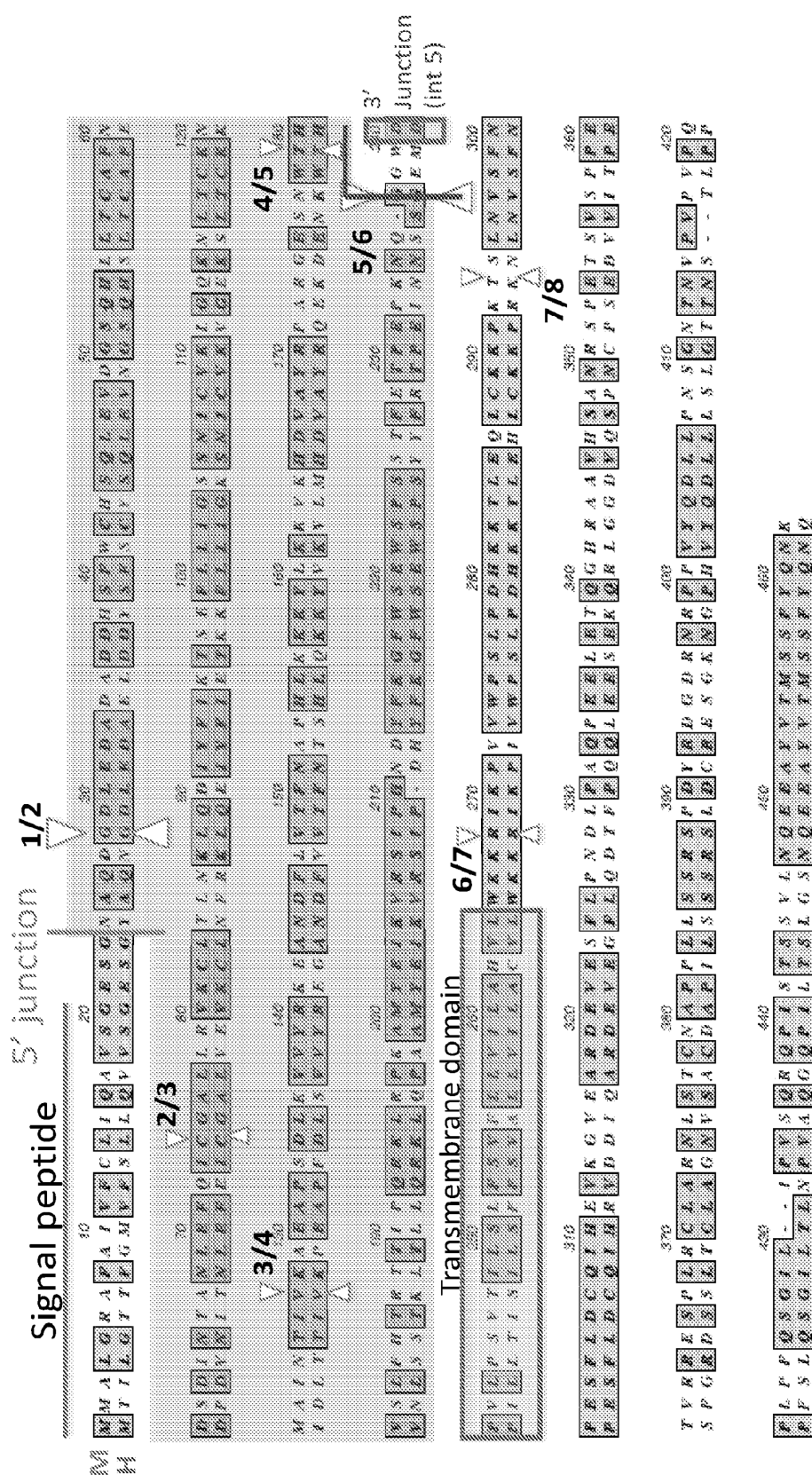


FIG. 3F

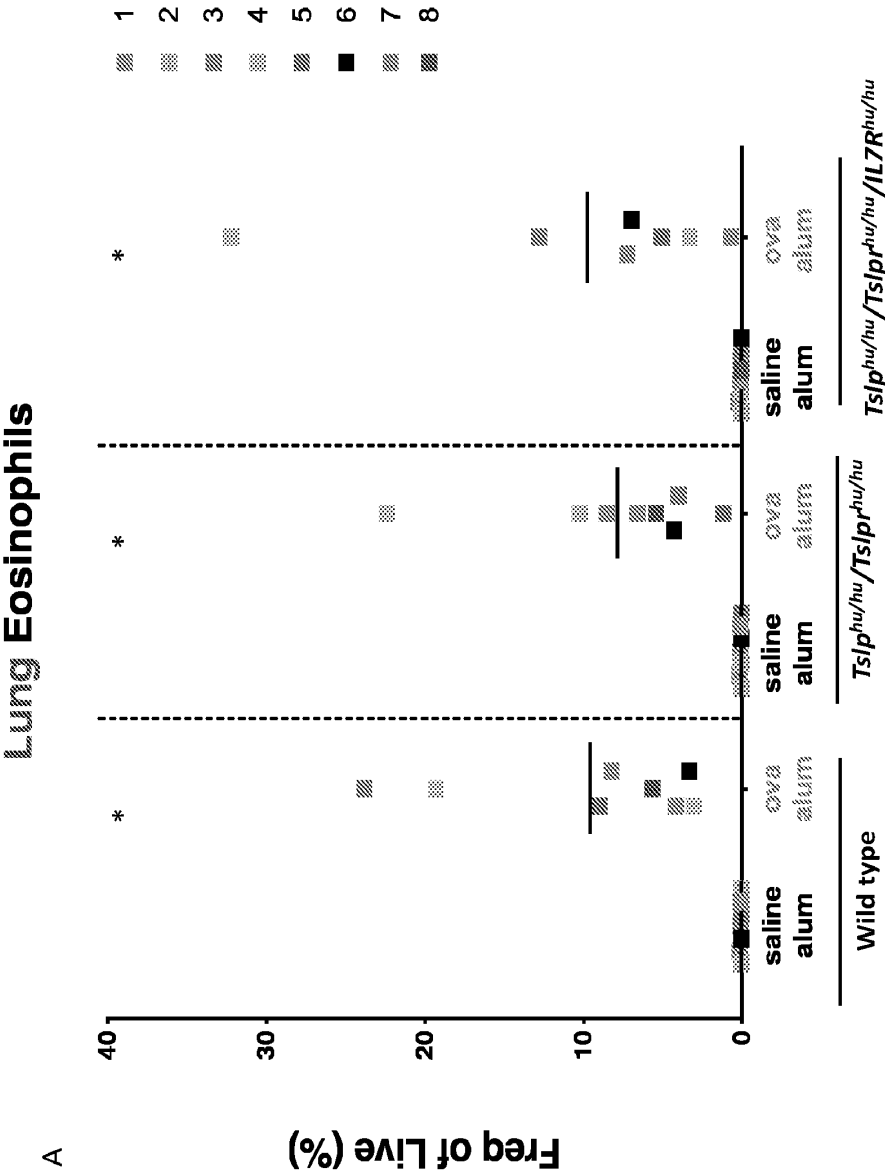


FIG. 4A

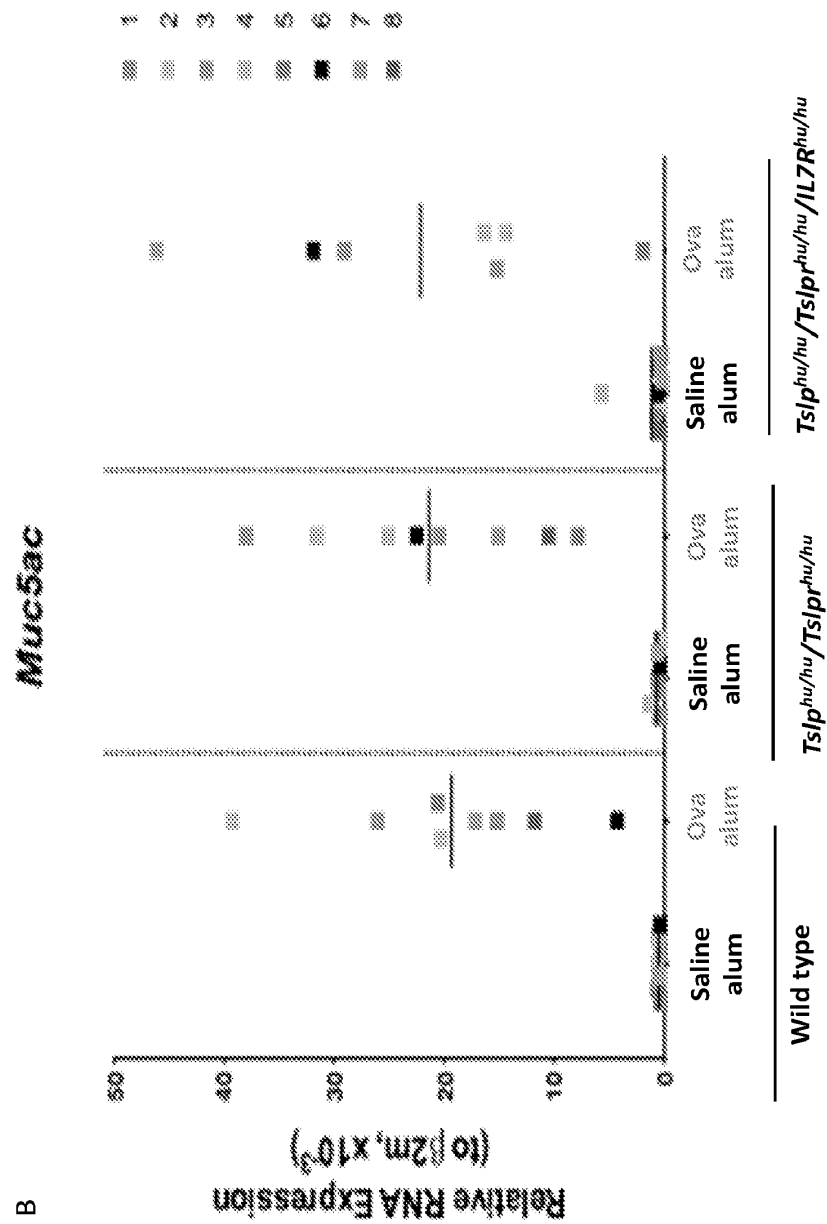


FIG. 4B

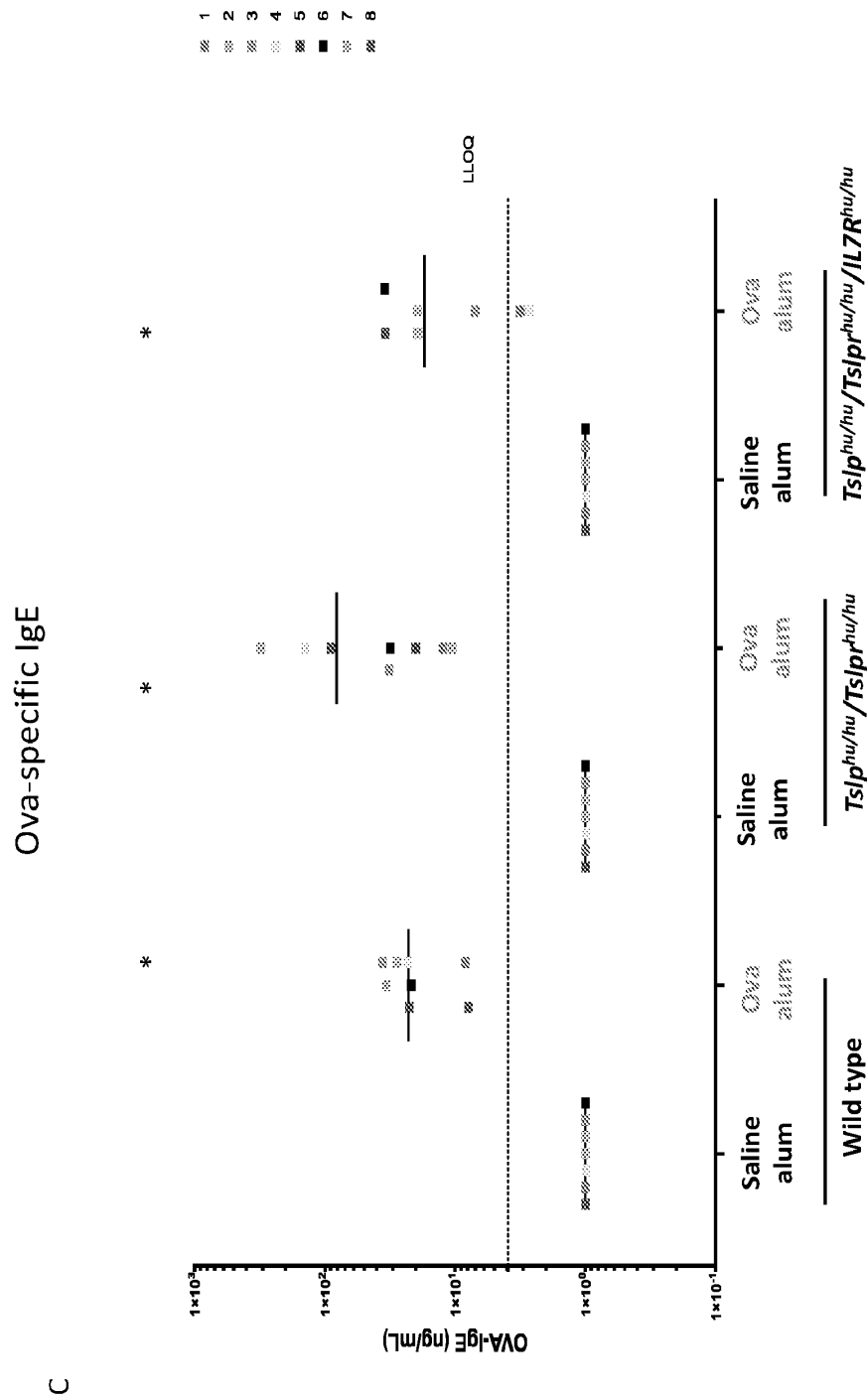


FIG. 4C

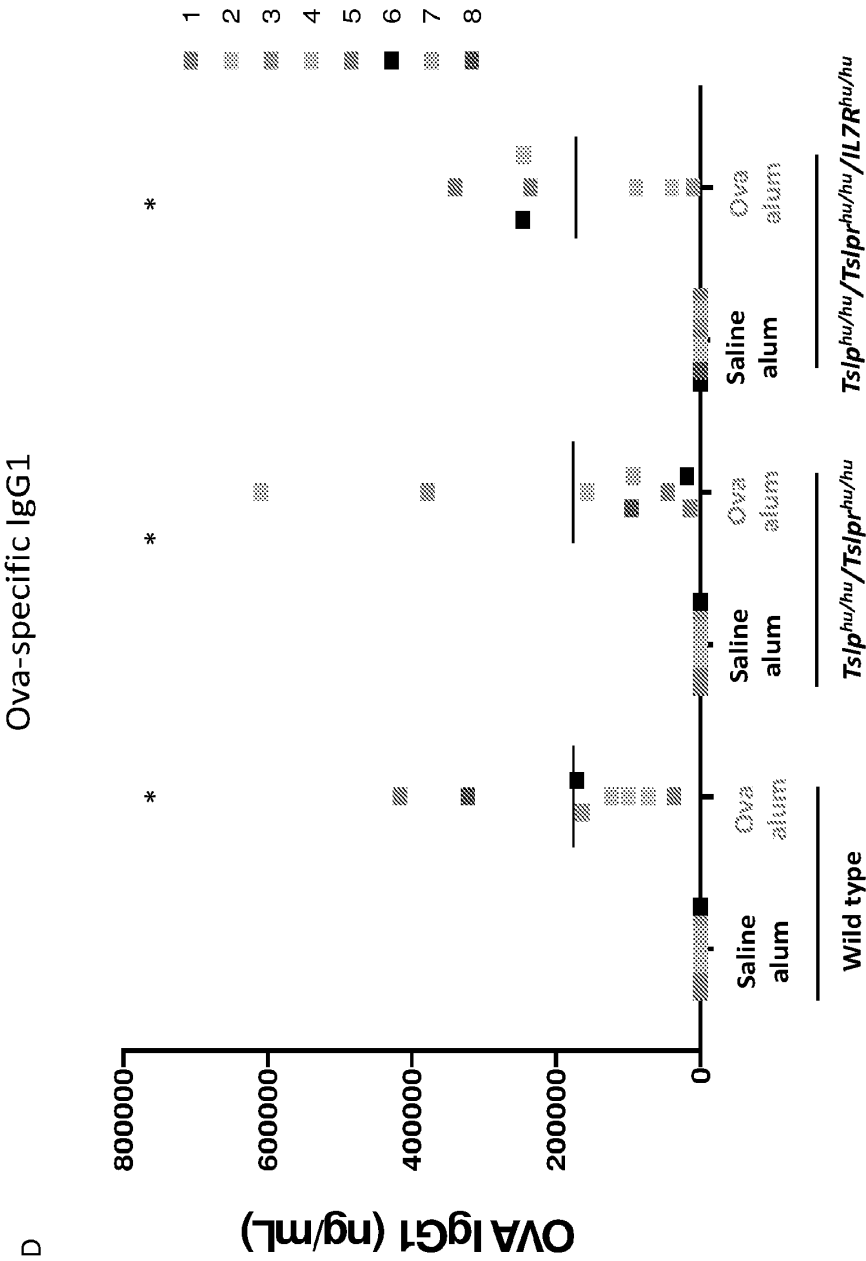


FIG. 4D

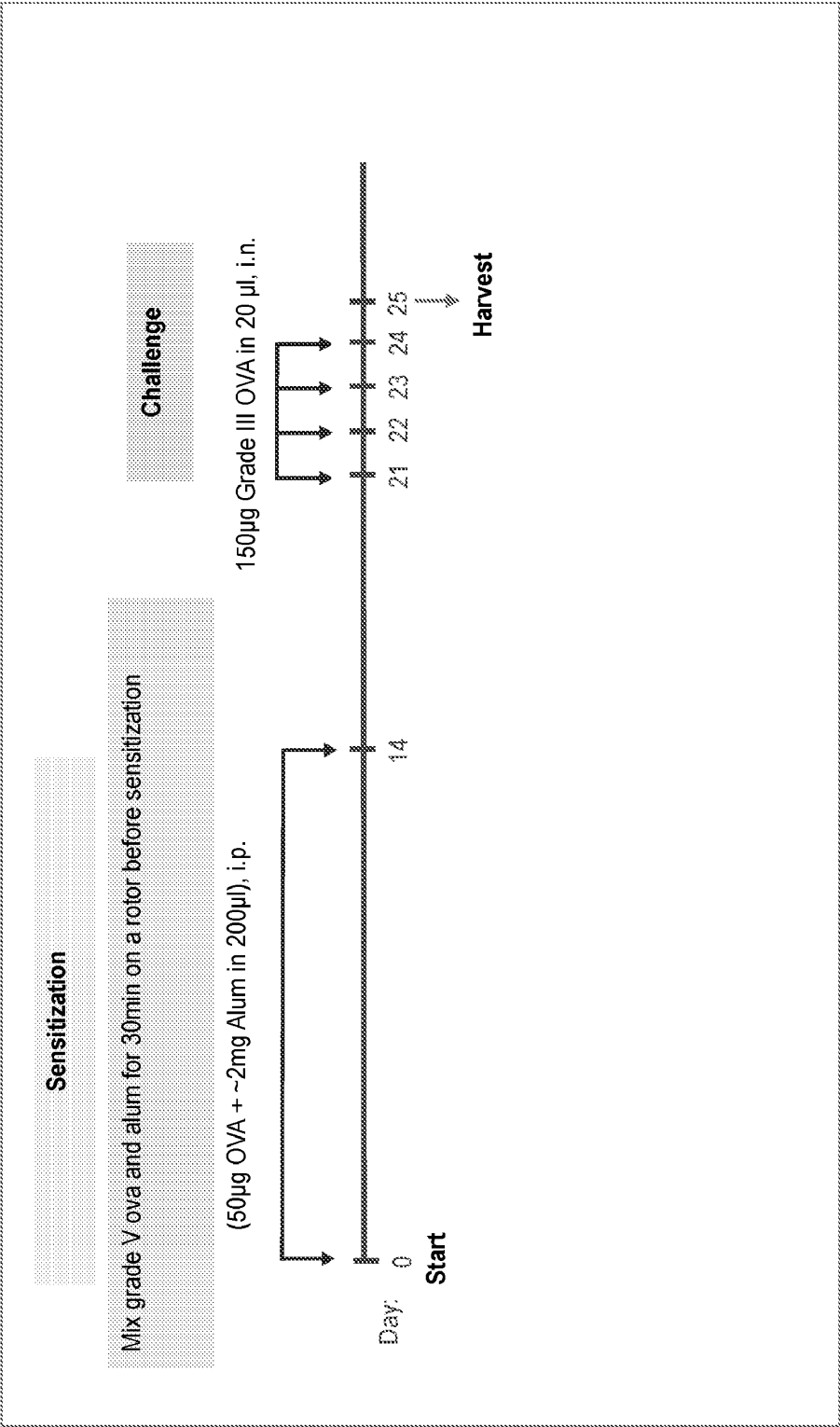


FIG. 4E