

Online supplement, Figure 1

Holdt et al.

ADAM17 proximal promoter; 2752bp upstream of the start codon

C57 TTGACAATCGGTAACAAAGTCAATGGGAAGCAGAAGCCACCACAGGCCCTCTCGGGGACTTTCCCAATTATACCTCAGTCCCCAGAATTAATTTATCTGCAGGTGGCAAAGATCACACCCCTGCTAGTGCCTGAGGCAAATCCTAATCAC 150
FVB TTGACAATCGGTAACAAAGTCAATGGGAAGCAGAAGCCACCACAGGCCCTCTCGGGGACTTTCCCAATTATACCTCAGTCCCCAGAATTAATTTATCTGCAGGTGGCAAAGATCACACCCCTGCTAGTGCCTGAGGCAAATCCTAATCAC 150

C57 CTGCTGTGAAGCAGCCTCTTATCTCACACCTGGGATTAACAAAACAAATTTCTCTAACTGGTTTTTTAAAGAACTAAAATTTCTCACCACAAAGCTGCATTTTTTTTTTTGAGACTTGAGAATTCATATTTCTTGAAGGGCTAGCTTTAT 300
FVB CTGCTGTGAAGCAGCCTCTTATCTCACACCTGGGATTAACAAAACAAATTTCTCTAACTGGTTTTTTAAAGAACTAAAATTTCTCACCACAAAGCTGCATTTTTTTTTTTGAGACTTGAGAATTCATATTTCTTGAAGGGCTAGCTTTAT 300

C57 CAACTTTATTTCAGCAGCAGAAAAAGCATCCAAATTAAGGTTTTATGACAGATAGGGTGAAGACAGTTAGGGCTTCAAGGTGGCTCAGTGCAGTGGGTAGATATTATGGGGGTGATTTTTTTCTCTTAAAAAACAACAAAAGACTAAG 450
FVB CAACTTTATTTCAGCAGCAGAAAAAGCATCCAAATTAAGGTTTTATGACAGATAGGGTGAAGACAGTTAGGGCTTCAAGGTGGCTCAGTGCAGTGGGTAGATATTATGGGGGTGATTTTTTTCTCTTAAAAAACAACAAAAGACTAAG 450

C57 ATAAAGGCTTGTAGCCAAGTGTGATGGCCATGCCATCATCTAGCGACAGGGAGGCTGAAGCTGGAAGCCCTGGGCAGGGTTACAAAATGAGCCTAGCTCATAAAGCCCATCACACTTTTCCCTTCTAGGACAAATCCCCAAAAAT 600
FVB ATAAAGGCTTGTAGCCAAGTGTGATGGCCATGCCATCATCTAGCGACAGGGAGGCTGAAGCTGGAAGCCCTGGGCAGGGTTACAAAATGAGCCTAGCTCATAAAGCCCATCACACTTTTCCCTTCTAGGACAAATCCCCAAAAAT 600

C57 AAACCTTGTAGGGTCAGGCTTCGACTGTCAGTTTTGGGACTCTTGATTTAACATAGCCCTGGCTGTGTTCTGTGTGTCAGCCTCCTAGTGTGGGATGGCAGGCATGGGTACCACCAAGCTGTAGGTGCCAGTTCTGCCCTGCAGGCTTT 750
FVB AAACCTTGTAGGGTCAGGCTTCGACTGTCAGTTTTGGGACTCTTGATTTAACATAGCCCTGGCTGTGTTCTGTGTGTCAGCCTCCTAGTGTGGGATGGCAGGCATGGGTACCACCAAGCTGTAGGTGCCAGTTCTGCCCTGCAGGCTTT 750

C57 TATCCAGCATGGCCCTCTGAGATGTTCTCTGGCTCTTCATCTCCCCAGGTGGAGTTATTTTTATCCTAAAGATATGGACTATTTGTCAAATCAAAGATGAATTTCAAATTTGGAATCTTAATTTGAATACTGACTTGTGAATGTTGAAGAC 900
FVB TATCCAGCATGGCCCTCTGAGATGTTCTCTGGCTCTTCATCTCCCCAGGTGGAGTTATTTTTATCCTAAAGATATGGACTATTTGTCAAATCAAAGATGAATTTCAAATTTGGAATCTTAATTTGAATACTGACTTGTGAATGTTGAAGAC 900

C57 TACTTAAAAATGGGACTTATCTGAAAACTTGTATGATAAAGTGGATCAGGAGTTTTTTAAAAATTAGCACAGTGAAGCCAGCCTGGTCTACAGAGTGAATTTCCAGGACAGCCAGGACCACACACAGAAATCCTGTCTCGAAAAACAAC 1050
FVB TACTTAAAAATGGGACTTATCTGAAAACTTGTATGATAAAGTGGATCAGGAGTTTTTTAAAAATTAGCACAGTGAAGCCAGCCTGGTCTACAGAGTGAATTTCCAGGACAGCCAGGACCACACACAGAAATCCTGTCTCGAAAAACAAC 1050

C57 AACAAAAAACCACAAAAACAGACACCCCTCCCTCCCTCCAAAAAACCACAAAAACCAAAACCTAGCACAGTGGTACTCAACCCCTTGGGTGAGTATCCCTTTGGGGGTGTCAGGGTCCCATTATCAGGTACCCCTGCAGTTATTTA 1200
FVB AACAAAAAACCACAAAAACAGACACCCCTCCCTCCCTCCAAAAAACCACAAAAACCAAAACCTAGCACAGTGGTACTCAACCCCTTGGGTGAGTATCCCTTTGGGGGTGTCAGGGTCCCATTATCAGGTACCCCTGCAGTTATTTA 1200

C57 CATTACCCTTTATAGCCGTAGCAAAATATAGTCAATGAAGCTGCAATTAACAATATATGGTTCAGGGTCTCCACACATGAGGAACTGTAGTAGAGGGTCCAAAGCATTAGGAAGGCTGAGTGCACCTGAAATAGCATTTACTAAACATAG 1350
FVB CATTACCCTTTATAGCCGTAGCAAAATATAGTCAATGAAGCTGCAATTAACAATATATGGTTCAGGGTCTCCACACATGAGGAACTGTAGTAGAGGGTCCAAAGCATTAGGAAGGCTGAGTGCACCTGAAATAGCATTTACTAAACATAG 1350

C57 CTCAGCTGCACAAAAGCTAGGCGACACAAAATATAATCTGCAGTCAACTAAAGTTACAAAACCTGGGGACATGGAGCCTGGACACTCAAGAGAAATATCATAGCATTTCTATTATTAAGAGGTGGCATCTACCGGGCGGTGGTGGCGC 1500
FVB CTCAGCTGCACAAAAGCTAGGCGACACAAAATATAATCTGCAGTCAACTAAAGTTACAAAACCTGGGGACATGGAGCCTGGACACTCAAGAGAAATATCATAGCATTTCTATTATTAAGAGGTGGCATCTACCGGGCGGTGGTGGCGC 1500

C57 ACGCCTTTAATCCAGCACTCGGGAGGCAGAGGCAGGCGGATTTCTGAGTTCAAGGCCAGCCTGGCCTACAGAGTGAATTTCAAGCAGCCAGGGTTATACAGAGAAACCCCTGTCTCGAAAAAACAACAAAACAAAACAAAACAAA 1650
FVB ACGCCTTTAATCCAGCACTCGGGAGGCAGAGGCAGGCGGATTTCTGAGTTCAAGGCCAGCCTGGCCTACAGAGTGAATTTCAAGCAGCCAGGGTTATACAGAGAAACCCCTGTCTCGAAAAAACAACAAAACAAAACAAAACAAA 1650

C57 CAAAACAAAAAAGCTGGCATCTAATTTGTGGGGTGACTTTCTTTTTTTGGTTAGGTATTCCTTGAATGTGTACTAGTGAAGTGTTTATACCTCGTGTACAGACTAGTTAGCTAACATGCCCCCAAAAAAATGTGCAAAAGTCA 1800
FVB CAAAACAAAAAAGCTGGCATCTAATTTGTGGGGTGACTTTCTTTTTTTGGTTAGGTATTCCTTGAATGTGTACTAGTGAAGTGTTTATACCTCGTGTACAGACTAGTTAGCTAACATGCCCCCAAAAAAATGTGCAAAAGTCA 1800

C57 GTAACCTGTTGAAAATGTTGCAAGACATTCACAACGAACAAATTAATCAGTTTATCTTTTTTCTGGAAGACGACTTGAATCTGACCAGGGCTATTAATGTTTCAGTACCACAAACAATAACACAGGG-- --AAAAAAGACGG 1950
FVB GTAACCTGTTGAAAATGTTGCAAGACATTCACAACGAACAAATTAATCAGTTTATCTTTTTTCTGGAAGACGACTTGAATCTGACCAGGGCTATTAATGTTTCAGTACCACAAACAATAACACAGGGGAAAAAAGACGG 1950

C57 CAAAACCAAGGGGTGAGTAGGAAACCAACTACAAGAGTTAGGGGTAGATGGTTCGCTCTGTTCACTAGGAGACTGCCTAGAGTAAGGAACCAAGGAGCAAAATAATGCTTTGTCATAAGTCTATGTACAGTCCCCTGAGCATTTT 2100
FVB CAAAACCAAGGGGTGAGTAGGAAACCAACTACAAGAGTTAGGGGTAGATGGTTCGCTCTGTTCACTAGGAGACTGCCTAGAGTAAGGAACCAAGGAGCAAAATAATGCTTTGTCATAAGTCTATGTACAGTCCCCTGAGCATTTT 2100

C57 CAGTGACAA--GAGACCTAGTCTCCCAGCAAGTTCGCCGAACAGCACACCCGATCCCGCTGGGGCGGATCTCCAGGGCACTGTGGCCGACTTACGCCCCCATCCCATAGGCAGGTAGTTGACCCACGCCAGACTTCACAGACCCCTC 2250
FVB CAGTGACAAAGAGACCTAGTCTCCCAGCAAGTTCGCCGAACAGCACACCCGATCCCGCTGGGGCGGATCTCCAGGGCACTGTGGCCGACTTACGCCCCCATCCCATAGGCAGGTAGTTGACCCACGCCAGACTTCACAGACCCCTC 2250

C57 AATAAAGACGCTGAAGGGGACTTTAATCAGGAAGAAGTTCGACCTGTCTAAGGACCTGCCATCCTCTCCACCTTCTGTTCCCGCGGTACCCGGGGACAGAGGCAGAGAGAGAGGGTTCGAGTACAGGACGCCCGAGCTGAAGGCCA 2400
FVB AATAAAGACGCTGAAGGGGACTTTAATCAGGAAGAAGTTCGACCTGTCTAAGGACCTGCCATCCTCTCCACCTTCTGTTCCCGCGGTACCCGGGGACAGAGGCAGAGAGAGAGGGTTCGAGTACAGGACGCCCGAGCTGAAGGCCA 2400

C57 GGAAGGCCTCAAGCAGGCCAGAGGGACCAGGAAGAACAGAGCCAGAAGATGGCGTTCTGCCGGCGCCGCCGGGGCGGGGCGAGCCAGCCCTCCACAATGCTCTACGGCACCCCTTCTTCCGGCTGTGGGCGCGGGGTGGTCTC 2550
FVB GGAAGGCCTCAAGCAGGCCAGAGGGACCAGGAAGAACAGAGCCAGAAGATGGCGTTCTGCCGGCGCCGCCGGGGCGGGGCGAGCCAGCCCTCCACAATGCTCTACGGCACCCCTTCTTCCGGCTGTGGGCGCGGGGTGGTCTC 2550

C57 CGGCTGCGGGCGGAAACGAGTTAAGCCGCTCTCAGCGAGCGCGCCTGCACCTTCCGGGAGCTTCCGCTGAGGCTAGCTTCCCTGTAGGCGGGCGGGAGGGAGAAGTTTGCAGGGCCGTGCTGGGAAGATCACCTCCGCTCCCATGGGAGCAGT 2700
FVB CGGCTGCGGGCGGAAACGAGTTAAGCCGCTCTCAGCGAGCGCGCCTGCACCTTCCGGGAGCTTCCGCTGAGGCTAGCTTCCCTGTAGGCGGGCGGGAGGGAGAAGTTTGCAGGGCCGTGCTGGGAAGATCACCTCCGCTCCCATGGGAGCAGT 2700

C57 TTCCCGAACGCTCTTTCCGGAAGGTTTCCAGAGAGGTGGTGGACGGGACAATG 2755
FVB TTCCCGAACGCTCTTTCCGGAAGGTTTCCAGAGAGGTGGTGGACGGGACAATG 2755

ACGT promoter region
ATG start codon
ACGT exon 1

ADAM17 cDNA (2484bp)

C57	ATGAGGCGGGCTCTCCTCATCCTGACCACCTTTGGTGCCTTCGTCTGGCACCCCGACCTCCGGAGGAAGCAGGCTCTGGCTCCCATCCGCGACTTGAGAAGCTTGATTCTTTGCTCTCAGACTACGACATCCTCTCCTTAGCTAATATT	150
FVB	ATGAGGCGGGCTCTCCTCATCCTGACCACCTTTGGTGCCTTCGTCTGGCACCCCGACCTCCGGAGGAAGCAGGCTCTGGCTCCCATCCGCGACTTGAGAAGCTTGATTCTTTGCTCTCAGACTACGACATCCTCTCCTTAGCTAATATT	150
C57	CAGCAGCACTCCATAAGGAAAAGGGATCTACAGTCTGCGACACACTTAGAAACATTACTAACTTTTTTCAGCTTTGAAAAGCATTTTAAATTATACTTGACATCAAGTACCGAACGCTTTTTCACAAACTTGAGAGTCGTGGTGGTGAC	300
FVB	CAGCAGCACTCCATAAGGAAAAGGGATCTACAGTCTGCGACACACTTAGAAACATTACTAACTTTTTTCAGCTTTGAAAAGCATTTTAAATTATACTTGACATCAAGTACCGAACGCTTTTTCACAAACTTGAGAGTCGTGGTGGTGAC	300
C57	GGGAAAAGAAGAAAGCGAGTACAGCGTGAAGTGGCAGCACTTCTTCTCAGTGGTACCGTGGTTGGTGAGCCTGACTCTAGGGTTCTAGCCACATAGGAGATGATGATGTTACAGTGAAGTCAACACAGATGGGGCAGAATATAACGTAGAG	450
FVB	GGGAAAAGAAGAAAGCGAGTACAGCGTGAAGTGGCAGCACTTCTTCTCAGTGGTACCGTGGTTGGTGAGCCTGACTCTAGGGTTCTAGCCACATAGGAGATGATGATGTTACAGTGAAGTCAACACAGATGGGGCAGAATATAACGTAGAG	450
C57	CCACTTTGGAGGTTTGTCAATGATACTAAAGATAAACGAATGCTGGTGTATAAGTCTGAAGATATCAAGGATTTTTTCAGCTTTGAGTCTCCAAAAGTATGTGGTTATTAAATGCAGATAGTGAAGAGCTGCTTCCAAAAGGGCTCATA	600
FVB	CCACTTTGGAGGTTTGTCAATGATACTAAAGATAAACGAATGCTGGTGTATAAGTCTGAAGATATCAAGGATTTTTTCAGCTTTGAGTCTCCAAAAGTATGTGGTTATTAAATGCAGATAGTGAAGAGCTGCTTCCAAAAGGGCTCATA	600
C57	GACAGAGAGCCATCTGAAGAGTTTGTTCGTCGAGTGAAGAGACGAGCTGAACCTAACCCCTTGAAGAATACTTGTAAATTAAGTCTGGTGGTAGCAGATCATCGATTTTATAAATACATGGGCCGTGGAGAAGAGAGCACCCTACAAATTAC	750
FVB	GACAGAGAGCCATCTGAAGAGTTTGTTCGTCGAGTGAAGAGACGAGCTGAACCTAACCCCTTGAAGAATACTTGTAAATTAAGTCTGGTGGTAGCAGATCATCGATTTTATAAATACATGGGCCGTGGAGAAGAGAGCACCCTACAAATTAC	750
C57	TTAATAGAGCTAATTGACCGAGTTGATGACATATACCGAACACGTCGTGGGATAATGCAGGGTTTAAAGGGTATGGAGTGCAGATAGAGCAGATTGCAATTCTCAAGTCTCCACAAGAGGTAACCTGGTGAAAGACACTTCAATATG	900
FVB	TTAATAGAGCTAATTGACCGAGTTGATGACATATACCGAACACGTCGTGGGATAATGCAGGGTTTAAAGGGTATGGAGTGCAGATAGAGCAGATTGCAATTCTCAAGTCTCCACAAGAGGTAACCTGGTGAAAGACACTTCAATATG	900
C57	GCAAAAGTTTCCCAAACGAAGAGAAGGATGCTTGGGATGTGAAGATGCTATTAGAGCAATTTAGCTTTGATATAGCTGAAGAAGCATCTTAAAGTCTGCCTGGCTCATCTTTTACGTACCAGGATTTTGATATGGAACTCTTGGATTA	1050
FVB	GCAAAAGTTTCCCAAACGAAGAGAAGGATGCTTGGGATGTGAAGATGCTATTAGAGCAATTTAGCTTTGATATAGCTGAAGAAGCATCTTAAAGTCTGCCTGGCTCATCTTTTACGTACCAGGATTTTGATATGGAACTCTTGGATTA	1050
C57	GCTTACGTTGGTTCTCCAGAGCAAAACAGTCATGGAGGGGTTTGTCCGAAAGCTTATTACAACCCAACCTGTGAAGAAAAACATCTATTAAATAGTGGTCTGACTAGTACTAAAAATATGGCAAACTATTCTCACAAAGGAAGCTGAC	1200
FVB	GCTTACGTTGGTTCTCCAGAGCAAAACAGTCATGGAGGGGTTTGTCCGAAAGCTTATTACAACCCAACCTGTGAAGAAAAACATCTATTAAATAGTGGTCTGACTAGTACTAAAAATATGGCAAACTATTCTCACAAAGGAAGCTGAC	1200
C57	CTGGTTACAACCTCATGAATTGGGACATAATTTGGAGCAGAACATGACCTGATGGCTAGCAGAATGTGCCCAAATGAGGACCAAGGAGGAAAGTATGTCATGTATCCCATAGCTGTGAGCGGTGACCACGAGAATAATAAGATGTTT	1350
FVB	CTGGTTACAACCTCATGAATTGGGACATAATTTGGAGCAGAACATGACCTGATGGCTAGCAGAATGTGCCCAAATGAGGACCAAGGAGGAAAGTATGTCATGTATCCCATAGCTGTGAGCGGTGACCACGAGAATAATAAGATGTTT	1350
C57	TCAAACCTGCAGTAAACAGTCCATCTACAAGCCATAGAAAGTAAGGCTCAAGAGTCTTCCAGGAGCGCAGCAACAAGGTGTGGCAACTCCAGGGTGGATGAAGGAGAGGAGTGTGACCCGGGTATTATGTACCTGAACAACGACACC	1500
FVB	TCAAACCTGCAGTAAACAGTCCATCTACAAGCCATAGAAAGTAAGGCTCAAGAGTCTTCCAGGAGCGCAGCAACAAGGTGTGGCAACTCCAGGGTGGATGAAGGAGAGGAGTGTGACCCGGGTATTATGTACCTGAACAACGACACC	1500
C57	TGCTGCAATAGTACTGCACACTGAAGCCGGGTGTGCACTGCAGTATAGGAACAGTCCCTGCTGTAAAAACCTGTCAGTTTGAGACGCGCAGAAGAAGTGCAGGAGGCTATTAATGCTACATGCAAAGGAGTGTCTTACTGCACAGGG	1650
FVB	TGCTGCAATAGTACTGCACACTGAAGCCGGGTGTGCACTGCAGTATAGGAACAGTCCCTGCTGTAAAAACCTGTCAGTTTGAGACGCGCAGAAGAAGTGCAGGAGGCTATTAATGCTACATGCAAAGGAGTGTCTTACTGCACAGGG	1650
C57	AATAGCAGTGAAGTGCACACTGAAGCCGGGTGTGCACTGCAGTATAGGAACAGTCCCTGCTGTAAAAACCTGTCAGTTTGAGACGCGCAGAAGAAGTGCAGGAGGCTATTAATGCTACATGCAAAGGAGTGTCTTACTGCACAGGG	1800
FVB	AATAGCAGTGAAGTGCACACTGAAGCCGGGTGTGCACTGCAGTATAGGAACAGTCCCTGCTGTAAAAACCTGTCAGTTTGAGACGCGCAGAAGAAGTGCAGGAGGCTATTAATGCTACATGCAAAGGAGTGTCTTACTGCACAGGG	1800
C57	AAGGTGTGCTGCAGGAACCTTTCTGGCCCGTGTGTGCCGTACGTGATGAGAGCAAAAGAACTTGTTTTTGAGGAAAGGGAAGCCATGTACAGTAGGGTTTTCGACATGAATGGCAAATGTGAGAAACGAGTACAGGACGTAATTGAG	1950
FVB	AAGGTGTGCTGCAGGAACCTTTCTGGCCCGTGTGTGCCGTACGTGATGAGAGCAAAAGAACTTGTTTTTGAGGAAAGGGAAGCCATGTACAGTAGGGTTTTCGACATGAATGGCAAATGTGAGAAACGAGTACAGGACGTAATTGAG	1950
C57	CGATTTTGGGATTTTCAATTGACAGCTGAGCATCAACACTTTTGGGAAGTTTCTGGCAGATAACATCGTTGGGTCTGTTCTGGTTTCTCCTTGATATTTGGATTCTTTTCAGCATTCTTGTCCACTGTGTGGATAAAGAACTGGACAAG	2100
FVB	CGATTTTGGGATTTTCAATTGACAGCTGAGCATCAACACTTTTGGGAAGTTTCTGGCAGATAACATCGTTGGGTCTGTTCTGGTTTCTCCTTGATATTTGGATTCTTTTCAGCATTCTTGTCCACTGTGTGGATAAAGAACTGGACAAG	2100
C57	CAGTATGAATCCCTGTCTCTGTTTTCATCAGTAACATTGAGATGCTGAGCAGCATGGACTCAGCATCTGTTTCGCATCATCAAGCCCTTTCCTGCACCCAGACTCCAGGTCGTCTGCAGGCCCTGCAGCCAGCTGCCATGATGCCGCCA	2250
FVB	CAGTATGAATCCCTGTCTCTGTTTTCATCAGTAACATTGAGATGCTGAGCAGCATGGACTCAGCATCTGTTTCGCATCATCAAGCCCTTTCCTGCACCCAGACTCCAGGTCGTCTGCAGGCCCTGCAGCCAGCTGCCATGATGCCGCCA	2250
C57	GTACCTGCGCTCCAAAACCTGGACCACCAGGGATGGACACCATCCAGGAAGACCCAGCAGACTCAGACTCAGATGATGACGGTTTGTGAGAAGGACCCCTTCCCAAACAGCAGCAGCTGCCAAGTCTTTGAGGACTCACAGAC	2400
FVB	GTACCTGCGCTCCAAAACCTGGACCACCAGGGATGGACACCATCCAGGAAGACCCAGCAGACTCAGACTCAGATGATGACGGTTTGTGAGAAGGACCCCTTCCCAAACAGCAGCAGCTGCCAAGTCTTTGAGGACTCACAGAC	2400
C57	CACCCAGTCACCCAGGAGCGAAAAGGCGGCTCATTCAAGCTGCAGCGTGCAGAGCCGAGTTGACAGCAAAGAGACAGAGTGC	2484
FVB	CACCCAGTCACCCAGGAGCGAAAAGGCGGCTCATTCAAGCTGCAGCGTGCAGAGCCGAGTTGACAGCAAAGAGACAGAGTGC	2484

ATG start codon
TAG stop codon
ACGT coding sequence

ADAM17 3'-untranslated region (381bp)

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C57 TAGTGGGGAACCTTGGCCTGCTCTAGGACATATACCTGCAGATGTTCCATAGAGCTGACCTGAATCAAACATAGATTATAATGATCTGAGAAACGGGGAAGCAACTTAGCAGATGCTGGTCATGTGCTATGACCTTCACATGACATCCTATG 150
FVB TAGTGGGGAACCTTGGCCTGCTCTAGGACATATACCTGCAGATGTTCCATAGAGCTGACCTGAATCAAACATAGATTATAATGATCTGAGAAACGGGGAAGCAACTTAGCAGATGCTGGTCATGTGCTATGACCTTCACATGACATCCTATG 150

C57 TATGTAGGCCCTTTGAAGAGGTGAGGTAAATCTGGCTTATGTAAGGCTTTCAGGTTTTGGGTTTTCTTTTATAATCTAAAATCTCCTTTGACCTGTGGTGCAGAAGCAGAAAGTAAGGCTGGACCCCGTTCCTGGTGACAGTGCTGTTAAGT 300
FVB TATGTAGGCCCTTTGAAGAGGTGAGGTAAATCTGGCTTATGTAAGGCTTTCAGGTTTTGGGTTTTCTTTTATAATCTAAAATCTCCTTTGACCTGTGGTGCAGAAGCAGAAAGTAAGGCTGGACCCCGTTCCTGGTGACAGTGCTGTTAAGT 300

C57 CTTTCAGTCTGTTTTTCTGTACCCCTCTGACTACAGTGAAGCACTTAACAGTGAGGATAACTGGAACACAGACATACTT 381
FVB CTTTCAGTCTGTTTTTCTGTATCCTCTGACTACAGTGAAGCACTTAACAGTGAGGATAACTGGAACACAGACATACTT 381
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ATC stop codon
ACGT 3'-UTR sequence

AhR proximal promoter; 1467bp upstream of the start codon

C57 CCTGGGCACCAATTGTTGTTCTTAGTTTTCTCGCTATCCTTTTCCTTGCTGTTGTGTATCCTCTCTTCTGATCTCTTTCTCAAATCTATAAAACACATCAGACTTCATCTCTATCTTTCATGTCCAGCATCACCTACCTGACTCCCAA 150
FVB CCTGGGCACCAATTGTTGTTCTTAGTTTTCTCGCTATCCTTTTCCTTGCTGTTGTGTATCCTCTCTTCTGATCTCTTTCTCAAATCTATAAAACACATCAGACTTCATCTCTATCTTTCATGTCCAGCATCACCTACCTGACTCCCAA 150

C57 ATCACTTCTCTGCCTCTATTCTTTGGTGGTTAACAGCGACCTTCCTCTTTCCTTTATCATCTCTGCTGCTCTTTTCTCTCATCCCCATGGCTGTGCCATTGGTCTTGAGCTGGTCGATTCATCAATTTCCCAGCGATTCTCTCTTC 300
FVB ATCACTTCTCTGCCTCTATTCTTTGGTGGTTAACAGCGACCTTCCTCTTTCCTTTATCATCTCTGCTGCTCTCTTTTCTCTCATCCCCATGGCTGTGCCATTGGTCTTGAGCTGGTCGATTCATCAATTTCCCAGCGATTCTCTCTTC 300

C57 CATCTGTTTTGTTCCTGAGTAACAGAATTTCCACCTTTTCCACAGTGACTTTCCCAAGAAAGATGGAACATCATCTTCCAAATTAAGCCTTTAAAAGCTCTCTGTTGTCTGCAGAATGAGACCCAATTTCTTATTAAATCTTTATGAT 450
FVB CATCTGTTTTGTTCCTGAGTAACAGAATTTCCACCTTTTCCACAGTGACTTTCCCAAGAAAGATGGAACATCATCTTCCAAATTAAGCCTTTAAAAGCTCTCTGTTGTCTGCAGAATGAGACCCAATTTCTTATTAAATCTTTATGAT 450

C57 TTGTTCTAGATTATCTTTTTTTTTTTTTTTTTCTTTTTCTCCCATCAGCTTACCGTACTACTAACAGAAACTCAGGTCTCTGGTCATAGTCTCAGTACCTACCTCCAAATTTCTCATGCTCTCAGCACTCCTGTGCTTCTTTCCTTCTC 600
FVB TTGTTCTAGATTATCTTTTTTTTTTTTTTTTTCTTTTTCTCCCATCAGCTTACCGTACTACTAACAGAAACTCAGGTCTCTGGTCATAGTCTCAGTACCTACCTCCAAATTTCTCAAGCTCTCAGCACTCCTGTGCTTCTTTCCTTCTC 600

C57 ATCTTCTGAAGTCTGATGGAGGAAACGATGTTTTATTGCTTCTGTAGACATAAAATAAATGTGGGAGGAAAAGGATTATAAAACTCGTAGCCTTCAAGACAATAACTTTGCAGGGCATTTTTGAAGTTTTCCCTTAGAATGCTCT 750
FVB ATCTTCTGAAGTCTGATGGAGGAAAAGATGTTTTATTGCTTCTGTAGACATAAATAAATGTGGGAGGAAAAGGATTATAAAACTCGTAGCCTTCAAGACAATAACTTTGCAGGGCATTTTTGAAGTTTTCCCTTAGAATGCTCT 750

C57 CCAGTCGCAGTTATTTATCTACCAGCTCAATGTAATAATCTTTGTCAAAAATTAGATGACTCAACTCTAGGATGAGCTAAGCTCTTTGCCTGGTAAATCTTGATGTCTGGGTTACAAGGAATTTGCCTAGGCATAATGTGGCCTCACACCC 900
FVB CCAGTCGCAGTTATTTATCTACCAGCTCAATGTAATAATCTTTGTCAAAAATTAGATGACTCAACTCTAGGATGAGCTAAGCTCTTTGCCTGGTAAATCTTGATGTCTGGGTTACAAGGAATTTGCCTAGGCATAATGTGGCCTCACACCC 900

C57 CTTTTGAGGCTGGAAAACAGGTAAGTGGGCGAACACCACCCACCCAGAACCTCGGACTGCAAGAAGTGTGGGAGTCACTACGTCTGCGTCAACAGTGTGCAAGAGGGTGGGGCCCTCCTGGGAACCGTGAGGGGCGGGGCCGA 1050
FVB CTTTTGAGGCTGGAAAACAGGTAAGTGGGCGAACACCACCCACCCAGAACCTCGGACTGCAAGAAGTGTGGGAGTCACTACGTCTGCGTCAACAGTGTGCAAGAGGGTGGGGCCCTCCTGGGAACCGTGAGGGGCGGGGCCGA 1050

C57 GCAGTGGGGCGGGCTGGAGCCGGGGCGGAGCTGCGCGGGTTCGCGGTGCGGAGGAGCGGGCTCGCGGGGGCGGAGCGTGTGTGCGCTCCCTTTGACGCTCGGTGCCACGCGTGTCCCGGAGAGGCTCAGCCCGGAGCGAC 1200
FVB GCAGTGGGGCGGGCTGGAGCCGGGGCGGAGCTGCGCGGGTTCGCGGTGCGGAGGAGCGGGCTCGCGGGGGCGGAGCGTGTGTGCGCTCCCTTTGACGCTCGGTGCCACGCGTGTCCCGGAGAGGCTCAGCCCGGAGCGAC 1200

C57 CCGGAGGACGAAGTGGTGGACGGACTCGGGGGTGGCTGCCAGGCAGGGTTGTGAGCGACGCCGCGGCACAGCGCGGGAGCCGGGAAGCCCTAGAGCACTGCGGCCCTCCTGACCCTCGGGACCGGGCGCGGCTAGCGTGGGGTTTCTC 1350
FVB CCGGAGGACGAAGTGGTGGACGGACTCGGGGGTGGCTGCCAGGCAGGGTTGTGAGCGACGCCGCGGCACAGCGCGGGAGCCGGGAAGCCCTAGAGCACTGCGGCCCTCCTGACCCTCGGGACCGGGCGCGGCTAGCGTGGGGTTTCTC 1350

C57 CTCCGCGGCCAGCTCGGGCAGCCGAGTCTCCTCTGTGCGCCGCACTGCGCGTTCGCGGTTCGCCGCTCGGGCGGCTCACCTGGGCGCAGCGCGGGCAGGGCGCGCCTCGGGACGCAGGTGGAGCGGGCAGGGCGCGGGCACC 1500
FVB CTCCGCGGCCAGCTCGGGCAGCCGAGTCTCCTCTGTGCGCCGCACTGCGCGTTCGCGGTTCGCCGCTCGGGCGGCTCACCTGGGCGCAGCGCGGGCAGGGCGCGCCTCGGGACGCAGGTGGAGCGGGCAGGGCGCGGGCACC 1500

C57 ATG 1503
FVB ATG 1503

ACGT promoter region
ATG start codon
ACGT exon 1

AhR cDNA (2564bp)

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C57 ATGAGCAGCGGCGCCAACATCACCTATGCCAGCCGCAAGCGGGTGCAGAAAACAGTAAAGCCCATCCCCTGAAGGAATTAAGTCAAATCCTTCTAAGCGACACAGAGACCGGCTGAACACAGAGTTAGA CGCCTGGCC 150
FVB ATGAGCAGCGGCGCCAACATCACCTATGCCAGCCGCAAGCGGGTGCAGAAAACAGTAAAGCCCATCCCCTGAAGGAATTAAGTCAAATCCTTCTAAGCGACACAGAGACCGGCTGAACACAGAGTTAGA CGCCTGGCC 150

C57 AGCCTGTGTGCCCTTCCCGCAAGATGTTATTAATAAGCTGGACAAAACCTCTGTCTTAGGCTCAGCGTCAGCTACCTGAGGGCCAAAGACTTCTTTGATGTTGCATTAAAGTCCACCCCTGTGACAGAAATGGAGGCCAGGACCAGTGT 300
FVB AGCCTGTGTGCCCTTCCCGCAAGATGTTATTAATAAGCTGGACAAAACCTCTGTCTTAGGCTCAGCGTCAGCTACCTGAGGGCCAAAGACTTCTTTGATGTTGCATTAAAGTCCACCCCTGTGACAGAAATGGAGGCCAGGACCAGTGT 300

C57 AGAGCACAAAATCAGAGACTGGCAGGATTTGCAAGAAGGAGAGTCTTGTGTACAGGCGCTGAATGGCTTTGTGCTGGTTGTACAGCAGATGCCTTGGTCTTCTATGCTTCTCCACTATCCAAGATTACCTGGGCTTTCAGCAGTCTGAT 450
FVB AGAGCACAAAATCAGAGACTGGCAGGATTTGCAAGAAGGAGAGTCTTGTGTACAGGCGCTGAATGGCTTTGTGCTGGTTGTACAGCAGATGCCTTGGTCTTCTATGCTTCTCCACTATCCAAGATTACCTGGGCTTTCAGCAGTCTGAT 450

C57 GTCATCCATCAGAGCGTATATGAGCTCATCCATACAGAAGACCGGGCGAATTCAGCGCCAGCTTCACTGGGCTCTAAACCCAGACTCTGCACAAGGAGTGGACGAAGCCCATGGCCCTCCACAGGCAGCAGTCTATTATACCCAGAC 600
FVB GTCATCCATCAGAGCGTATATGAGCTCATCCATACAGAAGACCGGGCGAATTCAGCGCCAGCTTCACTGGGCTCTAAACCCAGACTCTGCACAAGGAGTGGACGAAGCCCATGGCCCTCCACAGGCAGCAGTCTATTATACCCAGAC 600

C57 CAGCTTCTCCAGAGAACGCTTCTTTCATGGAGAGTGTCTCAGGTGCCGGCTGAGGTGCCTGCTGGATAATTCATCTGGTTTCTGGCAATGAATTTCCAAGGGAGGTTAAAGTATCTTCATGGACAGAACAAGAAAGGAAGGACGGA 750
FVB CAGCTTCTCCAGAGAACGCTTCTTTCATGGAGAGTGTCTCAGGTGCCGGCTGAGGTGCCTGCTGGATAATTCATCTGGTTTCTGGCAATGAATTTCCAAGGGAGGTTAAAGTATCTTCATGGACAGAACAAGAAAGGAAGGACGGA 750

C57 GCCTGTCTTCTCCACAACCTGGCTTTGTTTGAATAGCTACTCCACTTCAGCCACCCTCCATCTGGAATTCGAACCAAAAACCTTCTTTCAGGACCAACAACAAGCTAGACTTCACACCTATTGGTTGTGATGCCAAAGGGCAGCTT 900
FVB GCCTGTCTTCTCCACAACCTGGCTTTGTTTGAATAGCTACTCCACTTCAGCCACCCTCCATCTGGAATTCGAACCAAAAACCTTCTTTCAGGACCAACAACAAGCTAGACTTCACACCTATTGGTTGTGATGCCAAAGGGCAGCTT 900

C57 ATTCTGGGCTATACAGAAGTAGAGCTGTGCACAAGAGGATCGGGGTACCAGTTCATCCA GCTGCAGACAT CTTCACTGTGCAGAAATCCACATCCGCATGATTAAGACTGGAGAAAGTGGCATGACAGTTTTCCGGCT TTTGCAAAA 1050
FVB ATTCTGGGCTATACAGAAGTAGAGCTGTGCACAAGAGGATCGGGGTACCAGTTCATCCA GCTGCAGACAT CTTCACTGTGCAGAAATCCACATCCGCATGATTAAGACTGGAGAAAGTGGCATGACAGTTTTCCGGCT TTTGCAAAA 1050

C57 CACAGTCGCTGGAGGTGGTCCAGTCCAATGCACGCTTGATTTACAGAAAATGGAAGACCAGATTACATCATCGCCACTCAGAGACCACTGACGGATGAAGAAGGACGAGAGCATTTACAGAAGCGAAGTACGTCGCTGCCTTCATGTTT 1200
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C57 GCTACCGGAGAGGCTGTGTTGTACGAGATCTCCAGCCCTTCTCTCCCAATAATGGATCCCTACCAATACGCACCAAAAAGCAACACTAGCAGAAAAGACTGGGCTCCCCAGTCAACCCCAAGTAAGGATTTTCCACCCAGTTCCTTT 1350
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C57 ATGAGTGCCCTCATCCAGCAGGATGAGTCCATCTATCT GTGCTCCTTCAAGCCCTGCGC GTTAGACAGCCATTTTCTCATGGGCTCCGTGAGCAAGTGCAGGAGTTGGCAAGACAGCTTTGCGGGCCGAGGAAGTGAGGCTGCGCTG 1500
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C57 GAGGAGTCTTTCAGAACTGACTCCACCGCTGTGGTGTGAGTTGACTTCAAAGACATCGACATAACGGACGAAATCTGACCTACGTGCAGGATTCCTGAACAATTAACCTTTGCTGAACTCGGCTTGCCAGCAGCAGCCTGTGACTCAG 1800
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C57 GGCACGTTTGCAAGTTGGAACCCACCCCTCCCGTGTCTTCAACTGTCCCAGCAGGAACTAAAGCACTATCAGCTCTTTCCAGCTTACAGGGGACTGCTCAGGAATTTCCCTACAAACCAGAGGTGGACAGTGTGCCTTACACACAG 2100
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C57 -----
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ATG start codon
TGA/TGA stop codon
ACGT coding sequence