

Importance of Mast Cell Prss31/Transmembrane Tryptase/Tryptase- γ in Lung Function and Experimental Chronic Obstructive Pulmonary Disease and Colitis

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Supplemental FIGURE S1

133
B6 1 cccatactga taggcctggg gctgggcagg ggcattgggt ggtcctgact ctgctgtggg
BALB/c a
CBA a
SWR a
A/J a
129/Sv a
C3H/HeJ a

184
B6 61 aagacaccAT Ggctctgggg ccctactgtg gcatcctact gtttctggct gtttctgtg
BALB/c a (Tyr/Asn)
CBA a (Tyr/Asn)
SWR a (Tyr/Asn)
A/J a (Tyr/Asn)
129/Sv a (Tyr/Asn)
C3H/HeJ a (Tyr/Asn)

B6 121 agtgaactgg cttggggttg gtgtggcact ggggtggag gggcctgctt cctctcagga
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

186
B6 181 acttcacctg catttattct atttccact ctgggctgga gctcagagaa atctgggagc
BALB/c c
CBA c
SWR c
A/J c
129/Sv c
C3H/HeJ c

B6 241 catgtaagag ggggccgggt acctgaagt ctggccttag acaagcaaag ccaagttctt
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 301 catggtggcc tctgctttgt ctgggctcct cagctgggca gcttggctgt cactactgga
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 361 gacagaggct tgtgtgtatg tgtggggaca cctacaggac tagatcctgg aaggacacac |417
BALB/c c
CBA c
SWR c
A/J c
129/Sv c
C3H/HeJ c

B6 421 ctcaaggagg acctagaggt tgtgaggggc tgaggctcac tgcctcccag ctgttggtta
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 481 tggcccatgg ctggtcccac cctaccctgg aactaggatg cagttgacca ggccacaatc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 541 aattagctgg gccccacca gctgggcccc acctacctgg ctagatctag ctttagctgc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 601 ccaggatggg aacatctacc tcagggccac cttgggatct tccagggttg ggggcagtgc
BALB/c g a
CBA g a
SWR g a
A/J g a
129/Sv g a
C3H/HeJ g a

B6 661 ttaggccac aggaccagag tcaactcccac gggcagttcc cctaatacct ccgtctctat
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 721 ccttcaggca tcgcccatga agctctacag tcaggtgcac ctccaacaga tatttcggga |742
BALB/c a
CBA a
SWR a
A/J a
129/Sv a
C3H/HeJ a

B6 781 ttagagacca gtcctggcag gcagacccta gaggggcagt gcctgtggtg ggagagagtg
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 841 acctggccca gggaggctat gatttgccac aggcttctcc tgggaagctg cacctctgcc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

901 ccatttgat |915 cttcgagagc cactttccat ctctgcgac acagcctgct ggctctcaca
BALB/c t
CBA t
SWR t
A/J t
129/Sv t
C3H/HeJ t

B6 961 gttgatctct ttcttttgcg gatgttgctc ttgggaaaga gactcaaagc atcttcctca
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 1021 ggacgtacct ggtgttctgg gtgggaagga tgtggtctct tccatttctt tttatcaatg
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

1081 tggacceaat ttcgggtttc atttttagt acagattaag aggaaagcct |1130 tcccctgtgg
BALB/c c
CBA c
SWR c
A/J c
129/Sv c
C3H/HeJ c

B6 1141 gtgatctct tagattttca tgagaaaaaa aattgaggtg aaatttacat aacatttact
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 1201 cacgatacag tgtagcattt gttgacattt aacacatccc cagtgttttg tgatatacaca
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 1261 tctatctagt tccaaacatc cttctaaaaa ggaaacccca ttctcactta ggggggcacc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 1321 ccctaccccc agcctcctgg gcctccatag ctcccatcac ctgagccctt cctcaccct
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 1381 ttaattccag gcagtaagcc gtttgcccag ctccactgag catctttcta aggagcctgc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 1441 tacgtccttt ggggtagtgt tcggaagcca agatccatga acttactgct tctagggtag
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 1501 cggttcccaa cctgtggggc gcaaccctt gggggagatc aaaccctttt acaggggtcc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 1561 cctaacatta tttgcatatc aaatatttat attatgattc ataatagcaa agttacagtt
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 1621 atgaagtagc aacataaata attttatggt tgggggttac aacaacacag ggaactgtat
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

|1704

B6 1681 gaatgggtcc cagtgttagg aagattgaaa accctagcat gcaaccacaa tgcttctgga
BALB/c g
CBA g
SWR g
A/J g
129/Sv g
C3H/HeJ g

|1741

B6 1741 aagagaccag cggatgggga gcagagacat ttgtagatgc cccaagatgc tagggctccc
BALB/c g
CBA g
SWR g
A/J g
129/Sv g
C3H/HeJ g

B6 1801 aagatgggag tcatggaggg ctcccagaga aagggcattg agcagaatgc cggctctccag
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

|1869

B6 1861 attccctcgc caacagtgtc tcctctggat caggggtgtg ccatccccag gtttcaaact
BALB/c a
CBA a
SWR a
A/J g
129/Sv a
C3H/HeJ a

B6 1921 cgggaagtgc aatcgtggga gggcatgctg ccccagcagg cacatggccg tggcaggcta
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 1981 gcctccgtct gcacaaggtg cacgtgtgtg gaggtccct gtcagtcca gaatgggtgc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 2041 tcacagcagc ccaactgcttc tctgggtgag tcacttcata aagcctggct gcctggcctt
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 2101 atggggcaat gactgcaaac aggaccttga ttagccgtga ctcacccttg agtccaaggg
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 2161 tccctttcag tagagaaaac ttcattaagg |2194 tccaccacc tgcaatggca gtgtacagcc
BALB/c g
CBA g
SWR g
A/J a
129/Sv g
C3H/HeJ g

7-mer (attgggc)deletion/16-mer insertion|||||||2261-2267
B6 2221 ccctctccca catctgccac gggaggagaa tgcaacctcc attgggctta agtgtgatgc
BALB/c -----cgttaagtgtgatgct
CBA -----cgttaagtgtgatgct
SWR -----cgttaagtgtgatgct
A/J attgggc
129/Sv -----cgttaagtgtgatgct
C3H/HeJ -----cgttaagtgtgatgct

B6 2281 tggccacca tctagcttgt atcaggatgt atcttaaacc agccttaaca ggccttcca
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

2375| 4-mer (agcc) insert|2394-2395
B6 2341 cttgtctcga acacttctgg aactgccttt cccccagagt gccagccacc tcccaacgtc
BALB/c c agcc
CBA c agcc
SWR c agcc
A/J a agcc
129/Sv c agcc
C3H/HeJ c agcc

|2423 |2450
B6 2401 ccagctgttc ttgggccett acgtgagagg cactgccagg ttcaggcttt atgtacgcag
BALB/c a c
CBA a c
SWR a c
A/J a c
129/Sv a c
C3H/HeJ a c

B6 2461 tagctgtttc tgtgcctagc accgaggata gatgggacac tggctattgg caggggtggg
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 2521 cggtaggtgg acattggtgg tggtagtcat tgttgagggg ggacacactc acatctctcc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 2581 ctgcctccca ggtctgtgaa ctgctctgat taccaggtgc acttgggaga gcttacggtc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 2641 acaactgtctc cccaattctc cactgtaaaa cggatcatca tgtacactgg ctctccagga
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 2701 ccaccggggg ccagtgggga cattgccctg gtgcagctgt cctccccggt ggccctttcc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 2761 agccaggtcc agcctgtgtg cctcccagag gcctcagctg acttctaccc tgggatgcag
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 2821 tgctgggtga ctggctgggg ctatacaggg gagggaggta aggagcccct tctgaggtcc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

|2901

B6 2881 tccccatgg ggataagga gggtaagagg ggccacctgg ggaggagtgg gagccactgg
BALB/c a
CBA a
SWR a
A/J a
129/Sv a
C3H/HeJ a

2967||2968

B6 2941 tgccactgct ttgctcctag tggccagcc tagaggcaa ccacttattg gcctccacca
BALB/c tg
CBA tg
SWR ca
A/J ca
129/Sv tg
C3H/HeJ tg

B6 3001 agatccacat ctgaccaca gaaagacagt gccagcacgg gtagggggtt gaaccccatg
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

3119|

B6 3061 agggatgtgc ctgctgcgtg ttcactctca gcagtgagag gctggttact caacctccgc
BALB/c t
CBA t
SWR g
A/J t
129/Sv t
C3H/HeJ t

B6 3121 ctgaactttc ctttctctca gaggctctga agccccata caaccttcag gaggccaaaag
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 3181 tctctgtggt ggatgtaaag acctgcagcc aggettacaa tagtcccaat ggcagcctca
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 3241 tccagccaga catgctatgc gcccgggcc ctggggatgc ctgccaggtg agtgggctgg
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

|3327

B6 3301 gaatgtggag gaacggcgca ccatggagca cggtccttag aatcccatcc ttgttttgc
BALB/c c
CBA c
SWR c
A/J c
129/Sv c
C3H/HeJ c

B6 3361 cttctgtcct gcaggatgac tctggagggc cactagtctg ccaggtggct ggaacctggc
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 3421 agcaggccgg cgttgtcagc tggggtgagg gctgtggccg ccctgaccgc cctggcgtct
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

|3527

B6 3481 atgcccgggt tactgcctat gtaaactgga tccaccacca catcccagaa gcagggggct
BALB/c g(Pro/Pro)
CBA g(Pro/Pro)
SWR a(Pro/Pro)
A/J a(Pro/Pro)
129/Sv g(Pro/Pro)
C3H/HeJ g(Pro/Pro)

B6 3541 caggaatgca agggcttccc tgggtcctc tctggtctgc cctcttctgg ccaagcctct
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 3601 tctgtctgct ggtctctgga gtctgatgg ccaagtactg gctgagctct cctcccacg
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

B6 3661 cggcctcgga actcTGAatg aggtgtagca accaacc~~caa~~ gtgtctttct taaataagtt
BALB/c
CBA
SWR
A/J
129/Sv
C3H/HeJ

	1-mer deletion (c) (3334)	1-mer (a) insertion (3780)
B6	3721 <u>agtgttttatt cagctttgct ttgccctcc cctcccctta gctttgactt aggaagccaa</u>	
BALB/c		No insertion
CBA		No insertion
SWR		No insertion
A/J		No insertion
129/Sv	-	A
C3H/HeJ		No insertion
B6	3781 <u>gttttctgca tcagattatt gcaacattta acctgaattt gtagaacgga tgacataaa</u>	
BALB/c		
CBA		
SWR		
A/J		
129/Sv		
C3H/HeJ		
B6	3841 <u>caaatggatg tcaaataaa</u>	
BALB/c		
CBA		
SWR		
A/J		
129/Sv		
C3H/HeJ		

FIGURE LEGEND

FIGURE S1. **Strain-dependent variation of the mouse *Prss31* gene.** Shown are comparisons of the deduced nucleotide sequences of the *Prss31* genes in the WT **B6**, **BALB/c**, **CBA**, **SWR**, **A/J**, **129/Sv**, and **C3H/HeJ** mouse strains. The 5' and 3' untranslated regions of the reference B6 mouse *Prss31* transcript are underlined and in ***blue italics***. The translation-initiation and -termination codons of the B6 mouse *Prss31* gene are highlighted in **green**, the exons in **blue** (not underlined), and introns in **black**. Although the **129/Sv** mouse *Prss31* gene was the first sequenced in any mouse strain, the residue numbering in the depicted nucleotide sequence is based on that of the 5-exon, 3,859-mer **B6** mouse *Prss31* gene noted at GenBank accession number NC_000083 and GeneID 26945.