

Ast locus (6/8)

ATAGCATCACAATGAACTCCCTTCACGCCACCTCCTACTGCTTGGCAGTT Wild type
ATAGCATCACAATGAACTCCCTTC-----TGCTGGCA -18
ATAGCATCACAATGAACTCCCTTCA-----GCTGGCAGTT -15
ATAGCATCACAATGAACTCC-----ACCTCCTACTGCTGGCAGTT -10
ATAGCATCACAATGAACTCCCACC-----TCCTACTGCTGGCAGTT -9
ATAGCATCACAATGAACTCCCTTgaACGCCACCTCCTACTGCTGGCAGT +2,-1
ATAGCATCACAATGAACTCCCTTCActgctggCACCTCCTACTGCTGGCA +6,-3

capa locus (1/6)

CAGAGACGGACCACGACAAGAACCGACGAGGTGCCAACATGGGGCTCTAT Wild type
CAGAGACGGACCACGA-----GGTGCCAACATGGGGCTCTAT -13

Ccap locus (1/8)

GCACCTCTGGCTTGTGCCATTGCTCTCAGGCTTCGCTGGAAAGGGAGAA Wild type
GCACCTCTGGCTTGTGCCA-----GGAAAGGGAGAA -19

Crz locus (5/8)

TCTGCCGAAACATGTTGCGCCTCCTGCTGCTGCCCTCTTCCTCTTCACGCTCTCCATGTG Wild type
TCTGCCGAAACATGTTGCGCCTCC-----ATGTG -32
TCTGCCGAAACATGTTGCGCCTC-----TTCTCCTTCACGCTCTCCATGTG -15
TCTGCCGAAACATGTTGC-----TGCCCTCTTCTCCTCCTTCACGCTCTCCATGTG -12
TCTGCCGAAACATGTTGCGCCTCCTGC-----CCCTCTCCTTCTTCACGCTCTCCATGTG -6
TCTGCCGAAACATGTTGCGCCTCCTGCTGC---CCCTCTTCTCCTTCACGCTCTCCATGTG -3

Eh locus (8/8)

CATTTTGGAAATGCATTGCGCCGCCATAAGTCATTATACGCACAAAGAGATT Wild type
CATTTTGGAAATGCATTGCCCC-----ATTATACGCACAAGAGATT -10
CATTTTGGAAATGCATTGCCCCGCAT-----TATACGCACAAGAGATT -7
CATTTTGGAAATGCATTGCCCCGCATta-----TATACGCACAAGAGATT +2,-7
CATTTTGGAAATGCATTGCCCCGCATaAGTCATTATACGCACAAGAGA +2
CATTTTGGAAATGCATTGCCCCattgcattGTCATTATACGCACAAGAGAT +8,-7
CATTTTGGAAATGCATTGCCCCGCATttattaTCATTATACGCACAAGAG +6,-3
CATTTTGGAAATGCATTGCCCCGCAtgcataagtcgcgaTAAGTCATTAT +12

Mip locus (6/8)

ACTAAGACGCGGAGAACTACGGCTTTCTGATGGTGCTCCTCATCCTGGG Wild type
ACTAAGACGCGGAGAACTTACGG-----TGCTCCTCATCCTGGG +11
ACTAAGACGCGGAGAACTTACGGCTTT-----GCTCCTCATCCTGGG +8
ACTAAGACGCGGAGAACTTACGGCT-----GGTGCTCCTCATCCTGGG +7
ACTAAGACGCGGAGAACTTACc-----ATGGTGCTCCTCATCCTGGG +1,-9
ACTAAGACGCGGAGAACTTACGGCTTTacgGATGGTGCTCCTCATCCTGG +3,-1
ACTAAGACGCGGAGAACTTACGGCTTTcatggtGGTGCTCCTCATCCTG +6,-4

npf locus (5/8)

TTGCCGTGTGTGGCCCTTGCCCTCCTAGCCGCCGGCTGCCGAGTGAGGCG Wild type
TTGCCGTGTGTGGCCCTTGCCCTC-----GCCGGCTGCCGAGTGAGGCG -6
TTGCCGTGTGTGGCCCTTGCCCTCCT---CGCCGGCTGCCGAGTGAGGCG -3 [x2]
TTGCCGTGTGTGGCCCTTGCCCTaa----CGCCGGCTGCCGAGTGAGGCG +2,-6
TTGCCGTGTGTGGCCCTTGCCCTCCTAGCgccc-GCTGCCGAGTGAGGCG +4,-5
TTGCCGTGTGTGGCCCTTGCCCTCCTAGgctCCGCCGGCTGCCGAGTGAGG +3

Figure S5 Sequences of Cas9-induced mutations in neuropeptide genes. Number of identified mutations/total number of animals sequenced is shown next to each locus name. Symbols and colors are the same as in **Figure S3**.