

# A

*Gpr161* Exon 4 mutation

V K A R K A A A A A  
 GTCAAGGCCCGAAAG → GcCgcGGCCgcAgcG  
NotI

ctaaatgttttttaaaggcaatacagaaagcaacagcaagcaaatagaaagcagattaggataattcctctctcccctc  
 cctgtcttcttttctagCTACTACGCCGTCCTGTATCCAATGGTGTACCCCATGAAGATCACAG  
 GGAACCGAGCTGTGATGGCTCTCGTCTACATCTGGCTCCACTCTCTCATTGGCTGT  
 CTGCCGCCCTATTTGGTTGGTCATCGGTGGAGTTTGATGAGTTCAAGTGGATGTG  
 TGTGGCCGCGTGGCACCAGGAACCCGGCTACACCATTTTCTGGCAGATCTGGTGT  
 GCCCTGTTCCCTTTTCTCATCATGCTAGTGTGCTACGGTTTCATCTTCCGGGTGGC  
 CAGG**GcCgcGGCCgcAgcG**GTGCACTGTGGCACGGTGGTCACTGTGGAGGAGGA  
 CTCTCAGAGGAGCGGGAGGAAGAATTCTAGTACCTCCACTTCCTCCTCCGGCAGT  
 AGGAGGAATGCCCTTCAAGGAGTGGTCTATTCAGCTAACCAGTGCAAAGCCCTCAT  
 CACCATCCTGGTGGTCATTGGCGCCTTCATGGTCACTGGGGCCCTACATGGTT  
 GTCATTACCTCAGAGGCACTCTGGGGGAAGAACTGTGTCTCCCCAACCCCTGGAGA  
 CTTGGGCCACATGGCTGTCCTTTACCAGTGCCATCTGCCACCCTCTGATCTACGGA  
 CTCTGGAACAAGACTGTGCGCAAGGAGCTCCTGGGCATGTGCTTTGGGGACCGT  
 TATTACCGGGAATCCTTTGTGCAGCGACAGAGGACCTCCAGGCTCTTCAGCATTTC  
 CAACAGGATCACAGgtaactaggaaaaagaccctcacacctcaggcagatgtcaccggggtccttcccagtg  
 gctaagggcagtgtaggggtggctgtggtctcaaggctgaagcgccgcGAAGTTCCTATTCTCTAGAAA  
 GTATAGGAACTTCattctaccgggtaggggaggcgctttccaaggcagtcaggagcatgcg

# B

