**Supplementary File 3**

Modified pSP64 vector and inserts used for *Xenopus laevis* expression and electrophysiology

Sp6, HindIII, 5'UTR, SalI, XbaI, BamHI, Myc + TAA stop codon, 3'UTR, poly(A), EcoRI

**Modified pSP64 Vector**

ATTTAGGTGACACTATAGAATACAAGCTTGCTTGTTCTTTTTGCAGAAGCTCAGAATAAACGCTCAACTTTGGCGTCGACTCTAGAGGATCCGAGCAGAAGCTCATCAGTGAGGAAGATCTCTAAGGTTACCACTAAACCAGCCTCAAGAACACCCGAATGGAGTCTCTAAGCTACATAATACCAACTTACACTTTACAAAATGTTGTCCCCCAAAATGTAGCCATTCGTATCTGCTCCTAATAAAAAGAAAGTTTCTTCACATTCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACGAATTCGTAATCATGTCATAGCTGTTTCCTGTGTGAAATTGTTATCCGCTCACAATTCCACACAACATACGAGCCGGAAGCATAAAGTGTAAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTCACTGCCCGCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTTGCGTATTGGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTGCGCTCGGTCGTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAAAAATGAAGTTTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCGTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTCACGCTCGTCGTTTGGTATGGCTTCATTCAGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAAGCGGTTAGCTCCTTCGGTCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTACTTTCACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCTTCCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGACGTCTAAGAAACCATTATTATCATGACATTAACCTATAAAAATAGGCGTATCACGAGGCCCTTTCGTCTCGCGCGTTTCGGTGATGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCACAGCTTGTCTGTAAGCGGATGCCGGGAGCAGACAAGCCCGTCAGGGCGCGTCAGCGGGTGTTGGCGGGTGTCGGGGCTGGCTTAACTATGCGGCATCAGAGCAGATTGTACTGAGAGTGCACCATTCGACGCTCTCCCTTATGCGACTCCTGCATTAGGAAGCAGCCCAGTAGTAGGTTGAGGCCGTTGAGCACCGCCGCCGCAAGGAATGGTGCATGCAAGGAGATGGCGCCCAACAGTCCCCCGGCCACGGGGCCTGCCACCATACCCACGCCGAAACAAGCGCTCATGAGCCCGAAGTGGCGAGCCCGATCTTCCCCATCGGTGATGTCGGCGATATAGGCGCCAGCAACCGCACCTGTGGCGCCGGTGATGCCGGCCACGATGCGTCCGGCGTAGAGGATCTGGCTAGCGATGACCCTGCTGATTGGTTCGCTGACCATTTCCGGGTGCGGGACGGCGTTACCAGAAACTCAGAAGGTTCGTCCAACCAAACCGACTCTGACGGCAGTTTACGAGAGAGATGATAGGGTCTGCTTCAGTAAGCCAGATGCTACACAATTAGGCTTGTACATATTGTCGTTAGAACGCGGCTACAATTAATACATAACCTTATGTATCATACACATACG

**ASIC inserts for expression in *Xenopus laevis* oocytes**

>IpulchraASIC\_Ipul.rna.tri.12910.1

GTCGACATGTTACCAAGCAATCAATGGGCCATCACTGTGAATGCGACGCCAGCCCACCGCGTTGGGTCCGAGTATGATCCGCAGTACAACCCGCAGACCGCACGGGGGCCGGAAACCCAGGTGGTGCGGTATGCGGCGCCGGTGCGGACCGTGCTGGTGGACAGCTACTGCCAGACCAGCGCTCCGCCCTCCGCCAGCTGTCTCCCCATTGCGGAGCGGTACCAGTGCGCCATGGCCAGTGTCCAGTACAGCGAGGACGAACACTCCATAGGAATCAAGACATTCCTATCCGAGGAAACCACCATGCACGGCATCAAATATGTGGTGCTGCCGGGTGCGCGGATCACGATCAAGCGGGTGCTGTGGACGCTGGTGTTCGCCCTCTTCTGGGTCTACTTCATCTCGGTCTCCGTCAAGAAGGTCCAGTACTACTACTCCTTCCAGCACATCACCCAGGTAGACGAGGAGTCCAAGGAACTCAACTTCCCGGCCATCACGATATGCAACCTGAACCCGATCCGGCTGTCGGCGTTCACCAAGAGCGACCTGTACCAGGCGGGCCGCATGTACCAGATCCTGTCGGCCAACCTCACCCTGAAGGAGGACCTGTTCTCCTCGGGCGACGAGACCGCGGTCGCCCTCCGCTCCAAGACCGACTTCACCGAGCAGGACAAGCGCGTCCCCTTCGACCTCGAGGAGTTCCAGCTGCGTGCCGGCCACAAGATGAAGGACATGCTCAAGGCGTGCAAGTGGCGCGACCAGCAGTGCACCGAGAAGGACTTCCAGCCCGTGCTGACGGAAATGGGGCTGTGCTATCAGTTCAACAGCAACAAGTCGCTCGACCCGGAGACGGGCGAGTACGCGTTCCGCAAGGTGTACAAGGGCGGCGCCGGCAACGGACTCAAGCTACTCCTTGTCACCCAGGAGCAGGACTACCTTCCGCCCAACATCGAGGACTTCGACTCGACGCTGGAGACGGGGTTCAAAATCGAGGTGCACGACCCGGACGTGCCGCCGCTGGTGCACCAGCTGGGCATCGGGCTGGCGCCCGGGCTGCAGACGTTCGTGGTGCTGCAGAAGGAGGAGGTGAACTACCTGTCCGAGCCCTGGGGCTCCTGCATCGACCCCATGGAGCCGGGCAAGGTCACCAACTTCACCAAGTACTCGGACCCCGCGTGCCGCATCGAGTGCGAGACCGAGCACATCGTGCAGGAGTGCGAGTGCCGCATGCCCTTCATGCCCATTTTGCCGGCGTACGAGAACTCGAAGACGGTGTGTTCACCCGCGCAGATCATCAAGTGTGCGCGGTCCGCCCTGGCGCGGATAGAGGACGGAGAGGCGTGCGGGCCGGAGACGTGCATCAAGAGCTGCCGCATCTCCCGCTACACCAGCTCCCTCTCCTCCGTCAAGTTCCCCAGCTTCCTCGGGGCCATCAAGCTGCAGGAGGAGTTCCCCGACACCTTCCCCACCAAGAAGGACGTCACCCCCGCCAATGAGTCATCCGCGGCCGCCGCCTCCGCTCCCGTCACCGGCAAATGGAAAGAGACCATAGACGGAGCTGCGGCCCAGAAGAAATGGGAGCAGGCGCTGGTCGTGTCCATATACTTCCAGTCGCTGAGCTTGCAGAAGATCGAGCAGGTCGAGGCGTATGACTTCCCGGCCATGCTCGGCGACATCGGAGGTCTCATGGGGCTGTTTATCGGCGCCTCCGCCATGACGCTGTTCGAGTTTCTCTTCTTCTTCTGTGACTCTCTCATCCTCCGGCGCAAGAGCACCAAGCAGCCGCCGCCGGACACCTCGAGCCAGAGCTCGCCCTCCAGCGGCCAGAGGAAGGTTGTCCACGCCGAGATGGACAACGGCAAGTTCTCCATGCCGCCCGGCGCCGTCGATGGCTCCAAATTCGTCATCAACTTCAACCCGGACTACAATCCGGGCATTACACGAGTGCTTCCGCAATTCACTGCTCATCCTCTGCACAACAGCTTCCAGCAGCAACAACAGCCGCAGCAGCAGCCGCGCGGCTACTCACCTCTGATGAAGCGGGCCGCCGGCAACTTCGGAGCAACCGACGGCGGCGATGAGTCATTCGGCCAGCAGCCCGCGCCCGCCCAGCAGCCGCAGTTCAACACTCGAATGTACCAGCTGCCCAACAACCAGCCACAGGAGCGCTACTGCGGATCC

>HmiamiaASIC\_98006429

GTCGACATGAATAGGCCAATGAAATACGTCGCCACTCAACCCGTTGATCAACCCCCTCAATGCACATTCATTGATTCATATGCCGATCATGATCGAAAATCTCTCCTCGATTTTGCCGATGAAACAACAATGCATGGAATGCGTTATGTGGTCTTGCCGGGCGCGAAAATTACCATCAAACGCGTGCTATGGACTTTTGTTTTTGCGCTTTTTTGGGTGTACTTTATTTCAGTTAGTATTAAAAAGGTCCAATCTTATAGGAAATACCAGCATATCACCCAAGTTGACGAAGTATCCAATTCCCTTCCTTTTCCCACTATCACAATTTGTAATTTAAACCCAGTACGGATATTTTCTTTCACAAAAAATGATCTTTATCATGCCGGTCAGATGTATGAACTACTAGATGAGAACATGACGTTGATCAAAGGACTCTCCAAGAATGTTAGTAAATTTCTTTCAAAACTGGCCAACTTCACAAATTTCACACCGACGAGCTTCGATCTGGGGGAGTTTCAGCGCCGTGCAGGACATAAAATTGAAGACATGCTAATAAAGTGCAAATGGAGAGACGAAAAGTGTTCAGCAAAAGACTTCACACCCATATTGACCGAGATGGGCCAGTGTTATCAGTTTAACAAAAACCCCATCACAAATGATAGTGGTATTCCAATTTACAGAAATGTTTCAAAGGGTGGTCAAGGCAATGGCCTTAAACTCCTTCTTGTCACGGAAGAAGAACAATACTTGCCTCCTAACATTGATAAATTCGATGTGAGTCTTGAATCAGGATTCAAAGCTTTGGTTCACGACAACGACATTCCTCCTTTAGTTCAGCAGTTAGGCATCGGTCTAGCTTCGGGTTTACAGACATTCGTTGTACTTCAGAAAGCAGAGGTTAAATACTTGGGCCAGCCATGGGGCGTCTGCTTGAAATCAGAAAATTCCCCTGACAAGATTTGGAGCCGCTACAGCGATTCATCTTGTAGAATAACATGCGAAACGCAACATATTGTAAAGAAATGCAAATGTAGATTTCCATTTATGCCAATCTTAAAAACTGATCCTAATTCAAATACCATCTGCACAACAAAGCAAATCAAGGACTGTGGCACAAGGGAACTCGAAAACATCGAGGACGGTTCGGCGTGCGGACCCGATTTCTGCATCAAACCTTGTGAAATTACTCGCTACAGAAGTTCTTTGTCATCGGTAAAATTTCCCAGCGCTCAAGGAGAAATCAAACTAAGCGACGCACTGAAGAAGCACACAGAGGGAAAAGGACGTAATTACACATCAGGTTCAGAAAAACTATCAGATCGCGCTCTTGTCGTTTCCATCTACTTCCAATCACTCAGTCTGGAGAAAATTGAACAAGTTGAAGCATATGACTTTGCTGCCATGCTTGGTGACATCGGAGGTCTGATGGGTCTTTTCATCGGAGCAAGCGCAATGACATTATTTGAGTTCTTCTTCTTCTTTTGGGACTTTATTCTTCTTAGAAAAAAACCTAGCAACCCAGAATCCAATAACCGCCAGCCTCAAATGGCCAACGACCGGGACTGCATGCCACCGGGCGCCGTGGATGCCTCCAAATTCGTTCTTCCATTGCATAATGAATACAACCCACAGTTAATCCATGTCTCCGCCCTTCAACATCAAAACTCTGTTCAGCTGCCAATTCCAAGAATAGAGCAATACAACAAATTTTCACCCCTCGTCAAACGCAGCGTCATGCCAGTCCATCCCTACTCAGTAAATTTCTTCGAAGAGAAGAGTTCGAAACTGCTTATATCCAACCCCTTTCAAGAGAAGTACTGCGGATCC

>CmacropygaASIC\_Cmac.rna.tri.3223.1

GTCGACATGCATGGAGCAAGATATGTGGTGCTGCCAGGTGCAAGGATAACGATAAAGCGAGTGTTGTGGACACTGGTGTTTGCCCTCTTCTGGGTCTACTTCATCAGTGTGAGTGTGAAGAAAGTGCAGTTCTACTACTCCTACCAACACATCACACAGCTAGACGAGGAGTCACAGGCCTTAGACTTTCCTGCCATCACGATCTGTAACTTAAACCCAATTCGCCTGAGTGCATTCACTGCCTCCGACCTCTACAACGCTGGCAAAATGTACGACATTCTGGATGACGACTCCAAACTGAAAGAGGACCTTTTTTCAGAAGACAACCCAAAGACAAAACTCCTCATGAGGACTCTGGCTTCAATGACAGATGATGACAAGAAGAAAGACTTCAACCTGGAAGAGTTCCAAATGCGAGCAGGTCACAAGATGAAAGACATGCTGAAAGCGTGCAAGTGGAGAGACATCAAGTGCACTTCGGACGATTTCACCCCGGTTCTGACCGAGATGGGGCTGTGCTACCAGTACAACGTGAACAAAACATTCGACGATGAAACAGGTGACTACCAATTTAAGAAAGTGTACAAAGGAGGTGCTGGAAATGGTCTCAAAATGCTTCTCATTACCCAAGAAGACGAGTATTTGCCACCACAGATTGAGAGCTTCGAGACCTCCCTTGAGACTGGCTTCAAGATAGAGATCCATGATCCAGACGTGCCCCCTCTGGTCCACCAGCTGGGCATTGGCATTGCCCCTGGGCTTCAGACATTTGTGGTTCTGCAAAAGGAGCAGGTGACGTACCTGACTAAGCCGTGGGGTGAGTGTGTGCAAAAGTACGAGAAGACTATCAACTTCACAAAGTACTCGGATCCAGCATGTAGGATAGAGTGCGAGACCCAGCATATTGTGGACGAGTGCTCCTGCCGATTACCCTTCATGCCAATTCTGAGCAACAAGCCCAAAAGTAGCATTGTGTGTTCTCCTCAACTGTATAAGGAATGTGCGAGAGAGAAGTTGAACAAAATAGAAGACGGGGAGGCTTGTGGCCCAGAGACCTGCATCAAAGCCTGCGAGATTTCAAGGTACAAAAGCAGCATGTCATCAGTGAAGTTCCCCTCTTACCTGGGTGCAATCAAACTGAGCGAAGAATACCCAGGCGTGTTCACAAAGGACAGCACCAACTCTGGAGGTGGGGGTGACTCGGGTGGCGACGGAGGGGGCGATTCTCGAAGTGGTGGAGACGGAGGTTCGGATCGGTCATTTGACGGAGGGTCTGTTAAAGATGATGTGAAAGCTAAGGCTACTCAGTCTTATTGGAAAGAGGTTGAAAACAAAATATCAAAGCAAGCCTTGGTCGTGTCTATCTACTTCCAGTCTCTGAGTTTGCAGACTATTGTCCAGGTCGGAGCATATGACTTTGCAGCCATGCTTGGTGACATTGGTGGTCTGATGGGTCTATTCATCGGAGCTTCTGCCATGACACTTTTCGAGTTCTTCTTCTTCTTCTGCGACTCCCTCATCCTGCGTAGGAAGGGTGCCGGCAACAGGAACAGCAATGCAGGAGGGGGATCCGATGATGAGAAATCAGAAATGATAGGGGACAATTTGTTGCGAGGCCACGATGGTCAACCCCTTAAGAGTGTGCTGTTGGCTGCCCCTGGGGCCGTGGATGGGTCCAAGTTCGTGTTCAATGTCAACCACAACAACGACCACAACGCCGCCGCTGCCGCCGACTACAATGCTGCCATGTCCAGATTACTTCCACAGTTTAGCGCCCATCCTTTGCACAACTCATTTCAACAGCAACAACAGCAACAGCAACTGTTAAACCAACAGCGAGGCTACTCACCCCTGATGAAAAGGGCTAACTACCCCTCGTCAGGTGCATTCGGCCAACCGCCAAACCAGAACCAACCCAACTCAAATGATGTCGGTAGTCTCTTGTCCCCCCACGATCCCTCCAGCTACCCTGCGTCTCCAGTACCCCCCGCGAATGGTGGAATAGGGCTTCCGGTGACCTCATTTCCCGGAGCTCAGCAACAACAGAATATTCCACAGAACATGCTCGTCACTGCACCCTATCAACAGGGGGGTTTGCCCGGAGCGGGGGGCAAAATATTCCTGGCCAACAGTCTTCCTCAAGAGCGATATTGCTCTAGAGGATCC

>TtransversaASIC\_AB1973

GTCGACATGTCTTCTACAACACACGAACCAACAGACTCGGAGATGAGGCACAGGACTCCTGCAAATAATACACCAGGAGTTCTATCACATAATCAGCTTGAACTTAAAACAAAGGAAAGAATAGAAACATTCGGTGAAGATTGTGATTTCCATGGCATCAAAAGAATATTACGACATGAATATCACTTATGGAGAAGGATTACATGGCTCATGTTTTTTGTCTTTGGTTTAACATTTTTGACATATCAAATCACAGAGTCAGTCTTGACTTACCTGAAGTATGAACATGTTACTAAAGTGGATATGATGTACTCCAATACAATGGAATTTCCTGCCGTTACCATATGCAATCTTAACCAATTTAAAGTCTCTGCATTAACAGCTCTGGATTTGCATCACTTCGGACAAAAGCTAGGGATTTTCCTTAATGGCACATACACCCTTACACATCCCGACCAGTACAACAGTACATGGGTACAGTGGGTGAATGGAATCAACTGGACTGAAATAGCCAGTGGTCCTGATGACTTTGATGTGGAAGAGTTCTTTAACAGAACAGGTCATCAGAAGGAACAAATGATTTTGTTATGTCTTTGGAGAGGGGCAGCCTACAACCACTCTGATTTCCAAATGACACACACCCATCTAGGAAATTGTTTTACATTTAACCACGGAAAAGATGATGTTAACTTTCACACAAGAAATGCTGGAACTGAAGCAGGTCTAAAGTTGTACTTAAATGTTGAACAAGATGAATATCTAGAAGGTGAAGACTCTGCTGATGCTGGATTCAAACTGTTAGTTCACGATCAAAAAGATCCCCCATTTGTGAAAGAGTTGGGCTTTGGGGTTGCTCCTGGATATCATTATTTTGTGTCTTTACAGAAACAAAAGATTAAAAATCTGTCTAAGCCATGGGGTAATTGCCAGTCAGGACAACTGGAATACTATGACCACTACACAATTCCAGGCTGTCGGATAGAATGTGAACTGAAAACAGTCAAAGAAACATGTGGATGTCGTCTTATCGAGATGCCAGGAAATGATACAGTGTGTCACGGCAATGCATACATGGGATGTGCATATCCTGCATTAGAGAGAGTGGAACACTCGGACAATTGTGTTTGTCAAAATCCATGTGAATTTACACACTATAAACATGCCACAACCTTTGTGGAGCTAAGAGAAAATACAGTGGACAGGATTCAAAAGAAAAATATTCAGTATACAAAAGAAAAATTGAAGTCCGACCTGGTAATACTGAGTGTATACTTTGAGAGACTCAATTATGAAGAATATGAACAACTGCCAGCCTACACTCTGGTTGATCTATTCAGTGCCATTGGTGGTAATATGGGTCTCTTTATTGGAGCAAGTGCCTTGACAGTTCTCCATTTGATGGAGTTCATTGGGTCAGAGTTAACTCTTTGGATGTGGAACAGAAAAAACAAGAAACAAAACCAAGTAATGACAACAGTCACTCCCATGAAACTACCAATACAGGATGGATCC

>Lanatina\_ASIC\_g20471.1

AAGCTTCCTTGGCAAGCATGCAGAAAAAGACCTCGTGGATAGAGACTGCCAATCGGTTAGTCGGCAACACCAAAAGACAGAAGCAGTCAGAATCCACAGAATCAAAAGCTAGCAAAGAAAGCGGCTCCGTCAGCGAAGGCCTGGAACAATTTGGAGAAGACACCGACTTCCACGGACTGAAGCGTGTCTTCAGGAGAGACTATACACTGTTACGCAGAACCTTTTGGTTGTTTTTCTTTCTGGCGGGTCTTACGGGTTTTATCGCCAACACAGTTGACAGGCTGAGCTATTACTTGCAGTATCCACACTCGTCTGAGCTGGACGTGATGTACGATATGGAGTTAGAGTTTCCAGCCGTAACCATATGCAATATGAACTCCTATAGGCTATCCGCTTTGACAGACGTTGATATATTACATTTTGGTGAAAAACTACACATTTTAGACGAAAACCGCCGTCTTATACACCCGGAATATTATAACCAAAGCTGGGTGGATTGGGTGCACGGTATTAATTGGACAGAGTTAGCTGCCAACGATGACGAAGAAAATTTTGACGTGCTTGAATTTATACGTCGAACCGGCCACCAGCTGGAAGACATGATACTTCTGTGTTCGTGGAAAGGGCAACACTGTGGCCCGGAAAACTTTACCTCGGTTTTCACTCATTTTGGCATCTGTTATACTTTCAATGCTGACCACTCTTATAAATACGTATCACGAAAGGCGGGGGCGGGGAACGGGTTGAAGTTATATATCAACATCGAAGAAGAGGAGTATTTGACTTCGGATGTCCTAGCAGGGCAAGATGCTGGACTGAAGATGGTTATTCACGCTCAGGAAGAGCCGCCGTTTGTAAAGGAGTTGGGATTTGGAGTGCTACCGGGGGACCACCACTTTATAGCCATACAGAAGAAATACGTTCACAACTTGGTTCCTCCATGGGGAAATTGCTACGACGGGAAACTCAAGTATTACTCCCATTATAGCGTCCCTGCCTGTAGGATAGAGTGTGAGACAGATACCATCGTAAAAGAGTGTGGCTGCAAGCTGGCTGAAATGCCAGGCAACACATCCGTATGTCTAGGACATATGTACATGGGATGTGCCTATCCAGCCTTAGAGGAAGTGGAGCACTCAGACCTGTGCTCCTGTCAGAATCCATGTGATATGACCACCTATAGGCGAGACATCTCTTCCGTAAGGCTTCGAGATACTACCTTAGATATCATAGCCGAAAATAACCCGCAAGTTAAACGGGAAACACTAAGAGATAACCTACTGGTGTTGAACATCTATTACGAAGAGCTGTGCTATGAGACCATCAGACAAATCAAAGCATATTCCATACCAGCATTACTTAGCGACATAGGAGGCCAGATGGGTTTGTTTATAGGAGCTAGTGTTCTGACTCTGCTGCATGTGATCGAGGCCGTTGGGGCTGTTGTTGGTGGAAAGTTCCTCAAAACAACGAAGCAAGGGCGTGTCAGTACAACTCGGGTCCAAAGTTTGAAGGGATCCGAGCAGAAGCTCATCAGTGAGGAAGATCTCTAA

>PharmeriASIC\_comp166140

GTCGACATGGAAGAGCCGGAGACAGAACCTCTCACACAGAACGGACTGAACCAACGTTTGGGAAAGAAAGCGGTCCAGGACTGTATTATAATTGACTTGGTCAACAATGAAATACCTGAGCACGAGCGAAAGGAAACGTTGAAGACTCGTTTTGAAAACTTTGGAGAAGACACCGACGTCCACGGATTAAAATACATACTACGCGAGGACAGTCCAACGTATAAAAAAGTTATATGGATGATGTTGCTTGTAATTAGCCTTGGCTACATGACATTTGAAATTTATGGAAGGTTTTCGTGGTATTTTACTTACCCACATGTCACCAAGGTCGATGTTGTGTTTCGCAATAACATGGAATTTCCTGCATTCACCATTTGTAATATGAACAAATTCCGCGCGTCGGCCATGACAGATGTGGATATATTAAACATGGGAAAAATACTAGGAATTGTGAATGACAATATGAAACTGCACCACGGTGATCATTATAACGAAACATTCGTGAACTGGGTAAACAGCATGAACTGGACACGCGTCCGAGAGAAAAACAAAACATTTCACCTGGAAGAATTTTCTAGACGAGTTGGGCATCAGGCCAAAGACATGATTGTCTACTGCCGATGGAAGGATGAGTTATGCGGACCTGACAATTTTACTCACAGCTTCACGCATCTTGGAAACTGCTATACGTTTAACGACAATCAAAAGTTTGCGGCCCGAAAGGCGGGTGCCGGCAATGGACTAAAGTTATATCTTGACGTTGAAGAATTTGACTATCTTGAAACTGCAGATGCCGCAGACGATGGCCTGAAGGTCATAGTTCACAGTCAAAAAGAACCGCCTTTTATAAGAGAACTTGGATTTGGACTTATGCCGGCACAACACCATTACATTGGTATAAGGAAAGCCGAGATAATCAATTTACCAAAACCATATGGGACCTGTGCAGAAGATTTTCCAATGCGAATGTTTGAGCATTATACAATACCTGGATGTAGAATCCAGTGTGAAACGGAACACGTTGTACAGGCTTGTGGATGTCGTCTGCCAGAAATGCCGGTGTCATCTGACGCACCAATATGTTCGCCTCTTCAGTACGACGACTGCGCACTGGCAGAATTAATACGTGTCAGCGAGTCAGACGACTGTGTATGCCAAAGCCCGTGCCACCTCGATGACTTCCGGCTAACACATTCCAGTGTTAAACTACGCCCAGAAACAATAGAAAAGCTTCAGACCTTGCACGCACACGTTCCGAAACATCTCAAAGCGCATAATATTGTTGTGATGGACGTCTTCTTCGAGGCGTTGAGTCTAGAACTTATAGAGCAAAAAGTGGCGTACCCGTGGCCAAGCTTACTTGGCGACATTGGCGGGCAGATGGGCTTATTCATTGGCGCCAGCGTCCTGACAATCCTGCATGCTGTCGAGTTTTTCACCGATGAAATCGCTAAGAGTTGTAAAAAGAAAGCAGACAAGACGGACCAAGTGAACCCAGATGAAACTAGGGCGTCCATGGGTCCCAACGAATCTGCCGTGGTCGTCAAGGAAGCTGTGATAGGATCC

>OfusiformisASIC\_48178.5.p1

GTCGACATGACTGAAACAAAGGAAAAACAAACTGATCCTGTCATTGAGCATTCATTTTCAACAAGACTTAAGGAATTTGGTGAAGATGTTGAATTTCATGGAGTGAGACATCTGTTTAGAGATAATTCAATTGTGACAAAAGTGACATGGATTTTACTGTTTCTGTGTGGATGCAGTTGGCTGACCTACCAGATACATGATCGAATTATATATTATTATAAATATCCGCATATAACCAAAATTGATAAACTTTATGTTCCTTCATTAGATTTCCCAACAATCACAATTTGCAACATCAATACATTCAGAAGGCACAAATTAAATGAGTATGACCTCCTTCACTATGGAACAAGCCTGAATATTCTTGATGAGAACCGGACCCTTCTTCACCCAGAGCACTATGATAAAGCCTTTGATGACTGGGTTTACAGTATCAATTGGACAGATGTGGAGATCCATGACCGTTCCATCAATCACAGCATGGAGGAGATGTATGAAAGAGCAGGACACCAGATAGAGGATATGCTCATCTACTGCAAATGGAAACAACAGGAGTGTTCTGTTGCTAACTTTACCTTGATTAACACTCACTATGGGCGATGCTATCAATTCAATTCTGGCAAGGATGGTGTCAAACATCAGTCATTTAAAGGAGGTAAAGCAAATGGTTTGAAACTTTATCTAAATGTAGAGGAACTGGAGTACCTAAACTACATGGAAGCTTCAGACCTTGGCTTTAAAATTCTGGCACATGACCAGGATGAACCACCACTTATACAGGAATTGGGATTTGGAGTGACTACTGGCAACCACTACTTTATTGCATTGGAAACAGAAAGGGTGACAAGCTTACCAGACCCTTATGGCAACTGCGAAGAGGACCACAAACTTGACCATTATGATCATTACAGCATTCCTGCGTGCAGAATTGAATGCGAGACATTAATAGTTGAGGAGAAATGTTCATGTAGGCTTGTTGAGATGCATGGTGATCATGGTATCCGTGTTTGTACTGCTGAGGAATATCATGACTGTGCTCTGCCAACATTAGAGTCGATTACTGAGAGTGACACATGTGTATGTCAGAACCCATGTGAGCTGACCCAGTTTCAACACTCTATATCCTCTGTAAAGCTTCGTGAGAGTGCAGTTGAGATGATACATGGCCACACTTCAAGCAACATAAATCTGACTGAGTTTAAGTCAGTGGAGTTCATTGAGAAAAACCTTCTTGTTGTGAACCTCTTCTTTGATTCATTGAATTACCAGTACATTGAACAGACGGTTGCATATCCTGGTGTGTCACTATTAAGTGATGTTGGAGGTCAGATGGGATTGTGCATTGGGGCCAGCATTCTGACAGTTTTACATTTGGTTCAGTTTGCAATTGGGGAAATCATTAAGAAGTTTCAGAAGAGAGAGAATAAAGAAGTCAACACCAATGTTATTCATGTGGCATCTGCAAATCCTGTAGATGATAAACTTGGATCC

>Scalifornicum\_ASIC\_c469942.i1

GTCGACATGGAGCTACGGGACAACGGTTACGGGATCGGTCGGTCCCGTAAAATTAACAACAATGCTTACTCCGAATCTCTATCGTTTAACATCGCTAGTCGCTCCTTGTCAACGGACGGTTCGAACTTAGAAAGCAATTCCCGCTCGGCGTCTTTACGGTGGGTGCATTGGGCATCGCAGGTGTCTGATATACACGGAGTTAAACACATTGTCAGCGAATCTTCACGTTTTCGTAAGCTGCTTTGGACGCTCTTTGTGTTAACTTCATTAGGCGTGCTTCTTTTCCAGTTTTGTGAGTCAGCATGGAACTATGCTCAATTCTACCACATCACTAAACTTGACGTTGAATATCTACCTCATATGCCATTTCCCGCCGTTACTGTTTGCAATTTCAACAAATACAGAAGATCGGCGATCACACCTACAGATATGGTCCACATTGGTCAACCATTAGGTCTGGTGGACACGGAGAGAAATTTAAACAATCCAGAGTTATTCAGTGATGAGTTTATGGACAAATGGAACAATACTGATTGGGAAGTAGAAATGAAAAAGCCGTTCGACTTCACGGAGTTCACACGCAGAGCAGGACATCATTTTGACGAGACCATCCTCGAGGCTCTTTGGAATGGTCATTCATGTACCCCAGAAGACTTCAGAGACTTTCTAACTCACTATGGCAACTGCTTCATCTTCAATCAATACGAAGAAGATGAAGACCAATACCACTCAATGAGAGCTGGAACAGGTAATGGTTTGAGAATTGTGCTTGATGTCCACTCCCATGAGCATATACCGACGACAGACCTGGAGGATTCATTTATTAATGTTGGGTTTAAATTGATGATTCATTCCCCACACGAACCACCGTATCTTAAACAACTAGGATTTGCTGTTGGACCGGGAAATCATTATTTTCTAGCACTTAAAAGACAAGAGATAATTCGATTATCAACTCCATACACTAGCAAAGTATGTGAAAAGTCTTCAGAAGGAACCAAACACTTCCATGAATACTCAATGTCAGCATGTCGAATCGAATGTGAGACTTCATTGCTCGTTCAAGAGTGTGGATGCAAACTTGTTGAGCAGCCTGGCAACGCGTCAGTGTGTTCACCCCAGCAGGTCGCACTGTGTGCTCACGAGACATTAGATGAATACATTGAAGGACACATAGAATTTGACTGTCCCTGTGATATACCTTGCAAAAGTGAGTTGTACCCAGTTGATGTCTCTAACAGTGGTTTGAAGAGGGATATCACCGGTAAATCAGTTGGATTGTCCAACTACTCAATAGAATACATCAAAAATAATATTGTCATGCTGACGATATTTTATGAAGAACTAAACTTTGAGACGATCGAACAGCTTCCAGAAATGTCTATCGTAGACTTGCTTGGTCAGCTTGGTGGCAACATGGGGCTGTTTCTTGGTGCTAGTATACTTACCATTTTCCAAATTTTCGAATATATCTTTGATGAGTTCAAATTTTGTATATCGCTTGGGGCTGATCGCAACCAACAGAAGAGAAAGAACAAGAAGAAAATTTATGAATGTGATGACAAAAGCCTTCAAGCACCATTGTCCATACCATCACAGCAAGCAGGCATAATACGTGGATTTAGAAATACGACTGTGGGATCC