**Supplementary Information for**

**Snake venom NAD glycohydrolases: Primary structures, genomic location, and gene structure**

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The following are the venom gland transcriptomic sequences employed in this study.

>*Micrurus carvalhoi* NAD Glycohydrolase TRINITY\_DN61384\_c0\_g1\_i1|m.5640:

ATGCCCTTTCAAAACAGTTATTCCTGGACAAGGAAACAGAAACTGTTTTTGACGGGGGTGGTAGTGCTTTTGGGCACCATTACTGTTTTTGTGGTTTTTGGACTGCTCAAGCTTGGATGGAAGAAGAACCACGCTGCAGAAGAACAGCAGTGGAAAGGCAGAGGGACCACTGAACACCTCCTGGAAATTGTCCTGGGAAGATGTTACAACTTCATCAATACAATAAATCCTGAACTCAGAAATAAAGATTGTGTCAAAATACGGAAACTATTTGAACAGGCTTTTTTGTACAAGGACCCATGCAGTATAACCAAAGAAGATTACCAGCCTTTAATGGACCTGGCAAGATATCCCATACCATGCAACAAGTCCTTATTTTGGAGCAAAACATATGATCTGGTACATCATTACACGAAAACAAATCATAATTTCCTCACCTTGGAAGATACTTTGCTAGGCTACATAGCAGATGGGATTACTTGGTGTGGAAAGCCCTCTGATTCAGGAATCAATTATGAATCTTGTCCAAAATGGACTGAGTGTGAAAATAACCCCAATTCAGTATATTGGAAATTGGCATCTAAGATGTTTGCAGAAACATCCTGTGGAACAGTCCAAGTGATGCTCAATGGATCAATAGAGAATGGAGCTTTTAGACAAAGCAGCATTTTTGGCAGTGTTGAAATTGTTAACTTAAACCCAAAGAAAGTTTCCAAGATGCAGATCTGGCTAATGCATGATATTGGTGGACCCCAGAGGGAATCTTGCACAGGGGATTCCATTGCACAGTTGAGAGAGATCTTGGAAAACCGAAGTATAATTGTCTCCTGCGAAGACAATTACAGGCCGGCACAGTTACTTCAGTGTACTAGGAACCCCAACCACGCCACCTGCACAATTCGTTCCTGA

>*Micrurus corallinus* NAD Glycohydrolase TRINITY\_DN100482\_c0\_g2\_i2|m.92:

ATGCCCTTTCAAAACAGTTATTCCTGGACAAGGAAACAGAAACTGTTTTTGACGGGGGTGGTAGTGCTTTTGGGCACCATTACTGTTTTTGTGGTTTTTGGACTGCTCAAGCTTGGATGGAAGAAGAACCACGCTGCAGAAGAACAGCAGTGGAAAGGCAAAGGGACCACTGAACACCTCCTGGAAATTGTCCTGGGAAGATGTTACAACTTCATCAATACAATAAATCCTGAACTCAGAAATAAAGATTGTGTCAGAATACAGAAACTATTTAAACAGGCTTTTCTGTACAAGGACCCATGCAGTATAACCAAAGAAGATTACCAGCCTTTAATGGACCTGGCAAGATATTCCATACCATGCAACAAGTCCTTATTTTGGAGCAAAACATCTGATCTGGCACATCATTACACGAAAACAAATCATAATTTCCTCACCTTGGAAGATACTTTGCTAGGCTACATAGCAGATGGGATTACTTGGTGTGGAAAGCCCTCTGATTCAGGAATCAATTATGAATCTTGTCCAAAATGGACTGAGTGTGAAAATAACCCCAGTTCAGTATATTGGAAATTGGCATCTAAGATGTTTGCAGAAACAGCCTGTGGAACAGTCCAAGTGATGCTCAATGGATCAATAGAGAATGGAGCTTTTAGACAAAGCAGCATTTTTGGCAGTGTTGAAATTGTGAACTTAAACCCAGAGAAAGTTTCCAAGATGCAGATCTGGCTAATGCATGATATTGGTGGACACCAGTGGGAATCTTGCACAGGGCCTTCCATTGCACAGTTGAGAGAGATCTTGGAAAACCGAAGTATAATTGTCTCCTGCGAAGACAATTACAGGCCGGCACAGTTACTTCAGTGTACTAGGAACCCCAACCACACCACCTGCACAATTCGTTCCTGA

>*Micrurus lemniscatus* NAD Glycohydrolase TRINITY\_DN22889\_c0\_g1\_i1|m.65259:

ATGCCCTTTCAAAACAGTTATTCCTGGACAAGGAAACAGAAACTGTTTTTGACGGGGGTGGTAGTGCTTTTGGGCACCATTACTGTTTTTGTGGTTTTTGGACTGCTCAAGCTTGGATGGAAGAAGAACCACGCTGCAGAAGAACAGCAGTGGAAAGGCAGAGGGACCACTGAACACCTCCTGGAAATTGTCCTGGGAAGATGTTACAACTTCATCAATACAATAAATCCTGAACTCAGAAATAAAGATTGTGTCAAAATACGGAAACTATTTGAACAGGCTTTTTTGTACAAGGACCCATGCAGTATAACCAAAGAAGATTACCAGCCTTTAATGGACCTGGCAAGATATTCCATACCATGCAACAAGTCCTTATTTTGGAGCAAAACATATGATCTGGTACATCATTACACGAAAACAAATCATAATTTCCTCACCTTGGAAGATACTTTGCTAGGCTACATAGCAGATGGGATTACTTGGTGTGGAAAGCCCTCTGATTCAGGAATCAATTATGAATCTTGTCCAAAATGGACTGAGTGTGAAAATAACCCCAATTCAGTATATTGGAAATTGGCATCTAAGATGTTTGCAGAAACATCCTGTGGAACAGTCCAAGTGATGCTCAATGGATCAATAGAGAATGGAGCTTTTAGACAAAGCAGCATTTTTGGCAGTGTTGAAATTGTTAACTTAAACCCAGAGAAAGTTTCCAAGATGCAGATCTGGCTAATGCATGATATTGGTGGACCCCAGAGGGAATCTTGCACAGGGGATTCCATTGCACAGTTGAGAGAGATCTTGGAAAACCGAAGTATAATTGTCTCCTGCGAAGACAATTACAGGCCGGCACAGTTACTTCAGTGTACTAGGAACCCCAACCACGCCACCTGCACAATTCGTTCCTGA

>*Micrurus paraensis* NAD Glycohydrolase TRINITY\_DN86064\_c0\_g1\_i1|m.15110:

TTTCACACAGGAAAGCAGTGGTATCAACGCAGAGTACATGGGGAAGGCAGAAAGTGCAGCTGTTTCTACTTTTCAGAATCTTCTACTAAGATGCCCTTTCAAAACAGTTATTCCTGGACAAGGAAACAGAAACTGTTTTTGACGGGGGTGGTAGTGCTTTTGGGCACCATTACTGTTTTTGTGGTTTTTGGACTGCTCAAGCTTGGATGGAAGAAGAACCACGCTGCAGAAGAACAGCAGTGGAAAGGCAAAGGGACCACTGAACACCTCCTGGAAATTGTCCTGGGAAGATGTTACAACTTCATCAATACAATAAATCCTGAACTCAGAAATAAAGATTGTGTCAGAATACAGAAACTATTTAAACAGGCTTTTCTGTACAAGGACCCATGCAGTATAACCAAAGAAGATTACCAGCCTTTAATGGACCTGGCAAGATATTCCATACCATGCAACAAGTCCTTATTTTGGAGCAAAACATCTGATCTGGCACATCATTACACGAAAACAAATCATAATTTCCTCACCTTGGAAGATACTTTGCTAGGCTACATAGCAGATGGGATTACTTGGTGTGGAAAGCCCTCTGATTCAGGAATCAATTATGAATCTTGTCCAAAATGGACTGAGTGTGAAAATAACCCCAGTTCAGTATATTGGAAATTGGCATCTAAGATGTTTGCAGAAACAGCCTGTGGAACAGTCCAAGTGATGCTCAATGGATCAATAGAGAATGGAGCTTTTAGACAAAGCAGCATTTTTGGCAGTGTTGAAATTGTGAACTTAAACCCAGAGAAAGTTTCCAAGATGCAGATCTGGCTAATGCATGATATTGGTGGACACCAGTGGGAATCTTGCACAGGGCCTTCCATTGCACAGTTGAGAGAGATCTTGGAAAACCGAAGTATAATTGTCTCCTGCGAAGACAATTACAGGCCGGCACAGTTACTTCAGTGTACTAGGAACCCCAACCACGCCACCTGCACAATTCGTTCCTGA

>*Micrurus spixii* NAD Glycohydrolase TRINITY\_DN121140\_c2\_g1\_i1|m.22327:

ATGCCCTTTCAAAACAGTTATTCCTGGACAAGGAAACAGAAACTGTTTTTGACGGGGGTGGTAGTGCTTTTGGGCACCATTACTGTTTTTGTGGTTTTTGGACTGCTCAAGCTTGGATGGAAGAAGAACCACGCTGCAGAAGAACAGCAGTGGAAAGGCAAAGGGACCACTGAACACCTCCTGGAAATTGTCCTGGGAAGATGTTACAACTTCATCAATACAATAAATCCTGAACTCAGAAATAAAGATTGTGTCAGAATACAGAAACTATTTAAACAGGCTTTTCTGTACAAGGACCCATGCAGTATAACCAAAGAAGATTACCAGCCTTTAATGGACCTGGCAAGATATTCCATACCATGCAACAAGTCCTTATTTTGGAGCAAAACATCTGATCTGGCACATCATTACACGAAAACAAATCATAATTTCCTCACCTTGGAAGATACTTTGCTAGGCTACATAGCAGATGGGATTACTTGGTGTGGAAAGCCCTCTGATTCAGGAATCAATTATGAATCTTGTCCAAAATGGACTGAGTGTGAAAATAACCCCAGTTCAGTATATTGGAAATTGGCATCTAAGATGTTTGCAGAAACAGCCTGTGGAACAGTCCAAGTGATGCTCAATGGATCAATAGAGAATGGAGCTTTTAGACAAAGCAGCATTTTTGGCAGTGTTGAAATTGTGAACTTAAACCCAGAGAAAGTTTCCAAGATGCAGATCTGGCTAATGCATGATATTGGTGGACACCAGTGGGAATCTTGCACAGGGCCTTCCATTGCACAGTTGAGAGAGATCTTGGAAAACCGAAGTATAATTGTCTCCTGCGAAGACAATTACAGGCCGGCACAGTTACTTCAGTGTACTAGGAACCCCAACCACACCACCTGCACAATTCGTTCCTGA

>*Micrurus surinamensis* NAD Glycohydrolase TRINITY\_DN77054\_c0\_g1\_i1|m.2918:

TTTTCCCAGTCACGACAATTGCAGTGGTATCAACGCAGAGTACATGGGGAAGGCAGAAAGTGCAGCTGTTTCTACTTTTCAGAATCTTCTACTAAGATGCCCTTTCAAAACAGTTATTCCTGGACAAGGAAACAGAAACTGTTTTTGACGGGGGTGGTAGTGCTTTTGGGCACCATTACTGTTTTTGTGGTTTTTGGACTGCTCAAGCTTGGATGGAAGAAGAACCACGCTGCAGAAGAACAGCAGTGGAAAGGCAAAGGGACCACTGAACACCTCCTGGAAATTGTCCTGGGAAGATGTTACAACTTCATCAATACAATAAATCCTGAACTCAGAAATAAAGATTGTGTCAAAATACGGAAACTATTTGAACAGGCTTTTTTGTACAAGGACCCATGCAGTATAACCAAAGAAGATTACCAGCCTTTAATGGACCTGGCAAGATATTCCATACCATGCAACAAGTCCTTATTTTGGAGCAAAACATCTGATCTGGCACATCATTACACGAAAACAAATCATAATTTCCTCACCTTGGAAGATACTTTGCTAGGCTACATAGCAGATGGGATTACTTGGTGTGGAAAGCCCTCTGATTCAGGAATCAATTATGAATCTTGTCCAAAATGGACTGAGTGTGAAAATAACCCCAGTTCAGTATATTGGAAATTGGCATCTAAGATGTTTGCAGAAACAGCCTGTGGAACAGTCCAAGTGATGCTCAATGGATCAATAGAGAATGGAGCTTTTAGACAAAGCAGCATTTTTGGCAGTGTTGAAATTGTGAACTTAAACCCAGAGAAAGTTTCCAAGATGCAGATCTGGCTAATGCATGATATTGGTGGACACCAGTGGGAATCTTGCACAGGGCCTTCCATTGCACAGTTGAGAGAGATCTTGGAAAACCGAAGTATAATTGTCTCCTGCGAAGACAATTACAGGCCGGCACAGTTACTTCAGTGTACTAGGAACCCCAACCACGCCACCTGCACAATTCGTTCCTGA

>*Ovophis okinavensis* NAD Glycohydrolase comp19518\_c0\_seq1 (reversed): (Partial)

AGAGTGGAAAGGCAGAGGAACCACTAAACACCTGCTGGAAATTGTCCTGGGAAGATGTTACAACTTCATTAATACAATAAATCCTGAACTTAGAAATAAAGATTGTCTCAAAGTATGGAAACTATTTGAACAGGCTTTTCTGTACAAGGATCCGTGCAGAGTGACCGAAGAAGATTACCAGCCTTTAATGGACCTGGCAAGATATTCCATACCATGCAACAAGTCCTTATTCTGGAGCAAAACATATGACCTGGCACATCATTACACGAAAACCAATAATGATTTCCTCACCTTGGAAGATACTTTGCTAGGCTACATAGCAGATGGGATTTCCTGGTGTGGAAATCCCTCCAATTCAGGAGTCAATTATGAATCTTGTCCAAAATGGACTGAGTGTGAAAATAATCCCAGTTCAGTATATTGGAAATTGGCATCTAAGATGTTTGCAGAAACATCCTGTGGAACAGTTCAAGTGATGCTCAATGGATCAACAATGTCTGGAGCATTTAGAAAAAGCAGCATTTTTGGCAGTGTTGAAATAGTTAACTTAAACCCAAAGGAAGTTTCCAAGATGCAGATTTGGTTA

>*Protobothrops elegans* NAD Glycohydrolase comp350\_c0\_seq1:

CAACGCAGAGTACATGGGGGAGGCAGAAAGTGCAGCTGCTGCTGCTCTTCAAAAACTTCTACTAAGATGCCCTTTCAAAACAGTTCTTCCTGGACAAAGAAACAGAAACTGATTTTGACAGGGGTGATAGTGGTGCTTTTGGGCACCTTGACTGTTTTTGTGGTTTTTGGACTGCTCAGGCTTGGAAGGAAGAAGATCCCCATTGCAGAAGAACAGGAGTGGAAAGGCAGAGGAACCACTGAACACCTGCTGGAAATTGTCCTGGGAAGATGTTACAACTTCATTAATACAATAAATCCTGAACTTAGAAATAAAGATTGTCTCAAAGTATGGAAACTATTTGAACAGGCTTTTCTGTACAAGGATCCGTGCAGAGTGGCCAAAGAAGATTACCAGCCTTTAATGGACCTGGCAAGATATTCCATACCATGCAACAAGTCCTTATTCTGGAGCAAAACATATGACCTGGCACATCATTACACGAAAACCAATAATGATTTCCTCACCTTGGAAGATACTTTGCTAGGCTACATAGCAGATGGGATTTCCTGGTGTGGAAATCCCTCCAATTCAGGAGTCAATTATGAATCTTGTCCAAAATGGACTGAGTGTGAAAATAATCCCAGTTCAGTATATTGGAAATTGGCATCTAAGATGTTTGCAGAAACATCCTGTGGAACAGTTCAAGTGATGCTCAATGGATCAACAATGTCTGGAGCATTTAGAAAAAGCAGCATTTTTGGCAGTGTTGAAATAGTTAACTTAAACCCAAAGGAAGTTTCCAAGATGCAGATTTGGTTAATGCATGACATTGATGGACCTCAGAGGGAATCTTGCACAGGACATTCCATTGCACAGTTGAGAGAGATCTTGGAAAACAGAAATATAAGTGTCTCCTGCGAAGACAATTACAGGCCAGCACAGTTACTTCAGTGTACTAGAAACCCCAACCATACTGCCTGCAAAGTTTGTTCCTGAAATCATGGGGACGACAGAAGAGTGAATGTCATCAGATTCAGAGAAATTCAACAGATAATATCATTGTTTAATTTAGAGAGCTTCTTTCTATCACATAATTTTATATCACTCAATACGTTAAACGTTTCTGCTTTTCTAAGTGTCAATGTTCGTTATATTTTATTGTGTGTGTCCTTGTTTGCTGCTGCTAATAAAGGTAACAAAATATTTTAATAAAATATCCATTTATATTTTCTTCATTTTCTCTGACTCCCATTAAGTGCCAAGCAAGACAATCGAGAATGGTTAAGTATTTGTTACAGGCTAAGTGGGAATTTGAACATAGGTCTTTCTAGCTCTTGGCAAGCCATTGTCCTCTCTGTTTCAACTCTAAATTAAAACTGAAGGTCTGAAAAAGCCCTTGCATTTCTTAGTGATAGAATAGAATAAAATAGAGCTGGAAGGGACCTTGGA

>*Protobothrops flavoviridis* NAD Glycohydrolase comp3789\_c0\_seq1 (reversed): (Partial)

CGCAGAGTACATGGGGGAGGCAGAAAGTGCAGCTGCTGCTGCTCTTCAAAAACTTCTACTAAGATGCCCTTTCAAAACAGTTCTTCCTGGACAAAGAAACAGAAACTGATTTTGACAGGGGTGATAGTGGTGCTTTTGGGCACCTTGACTGTTTTTGTGGTTTTTGGACTGCTCAGGCTTGGAAGGAAGAAGATCCCCATTGCAGAAGAACAGGAGTGGAAAGGCAGAGGAACCACTGAACACCTGCTGGAAATTGTCCTGGGAAGATGTTACAACTTCATTAATACAATAAATCCTGAACTTAGAAATAAAGATTGTCTCAAAGTATGGAAACTATTTGAACAGGCTTTTCTGTACAAGGATCCGTGCAGAGTGGCCGAAGAAGATTACCAGCCTTTAATGGACCTGGCAAGATATTCCATACCATGCAACAAGTCCTTATTCTGGAGCAAAACATATGACCTGGCACATCATTACACGAAAACCAATAATGATTTCCTCACCTTGGAAGATACTTTGCTAGGCTACATAGCAGATGGGATTTCCTGGTGTGGAAATCCCTCCAATTCAGGAGTCAATTATGAATCTTGTCCAAAATGGACTGAGTGTGAAAATAATCCCAGTTCAGTATATTGGAAATTGGCATCTAAGATGTTTGCAGAAACATCCTGTGGAACAGTTCAAGTGATGCTCAATGGATCAACAATGTCTGGAGCATTTAGAAAAAGCAGGTATTCTCTTTCCATTCATGTGCTTAAAATGCTTCTAAAGTAAACAAGGAAAGTTTTCTTCACCATTTATTTGTCGATATTTCTGACCAAGCATCTCTATGTCAGTCATGGGTATCTGCAAGATATGGAGTAAAGAAGGTAGTCACAATGATGTGATTGAAGTACTACTGTAGGAGATGATCAGGCTGAGACTGAGGAGGGGTCAAAGGCATCATCAATTCTGAATCCCTTCACGCCCACAAGATGGATCTTGAAATGCATCTGAACTAAGTCCAGCCCACCTTGAATTCCTTATCTACCACCAAATTGCTTGACTATTAGTAGTTCCGATTCTTGTAGAGAGCTTAAGCT