Virus sequence info:

SARS coronavirus, complete genome

NCBI Reference Sequence: NC 004718.3

Influenza A virus (A/AA/Huston/1945(H1N1)) segment 1, complete sequence

GenBank: CY021716.1

Zika virus isolate ZIKV/Homo sapiens/PAN/CDC-259249_V1-V3/2015, complete genome

GenBank: MN124091.1

Measles morbillivirus complete genome

NCBI Reference Sequence: NC 001498.1

Group 1 Sequences:

> SARS virus strain 2 patients New York City

GTGACGAGCTTGGCACTGATCCCATTGAAGATTATGAACAAAACTGGAACACTAAGCATGGCAGTGGTGC > Influenza A virus 1 Albany

TCAATTATATCAATATGGAAAGAATAAAAGAACTAAGGAATCTAATGTCGCAATCTCGCACTCGCGAGA > Zika virus 1 Chicago

CGTTAGTGGACAGAGGCTGGGGAAATGGATGTGGACTTTTTGGCAAAGGGAGCCTGGTGACATGCGCTAA
> Influenza A virus 1 Wichita

AGGATTCAAGATCCTATTATCAGGGACAAGAGCAGGATTAGGGATATCCGAGATGGCCACACTTTTGAGG
> SARS virus strain 1 Austin

TTTAAAACTTACTGACAATGTTGCCATTAAATGTGTTGACATCGTTAAGGAGGCACAAAGTGCTAATCCT > Zika virus 1 DC

Group 2 Samples:

> Influenza A virus 2 Boston

TGATGATATTGATCAAAGTCTAATTATTGCTGCTAGGAACATAGTGAGAAGAGCTGCTGTATCAGCAGAT > Zika virus 2 Helena

TGTGTACGGAACCTGCCATCACAAAAAAGGTGAAGCACGGAGATCTAGAAGAGCCGTGACGCTCCCCTCC > SARS virus strain 1 Denver

GAATCAAACACATTATTATAGTACCAATTCCTGGAGATTCCTCAATTACCACTCGATCCAGACTACTGGA
> Influenza A virus 1 Nebraska

ATTAACGATAACCAAAGAGAAGAAGAAGAACTCAAGGATTGCAAAATTTCTCCTTTGATGGTTGCATAC
> SARS virus strain_1_LA

GAGTACACTGGTAACTATCAGTGTGGTCATTACACTCATATAACTGCTAAGGAGACCCTCTATCGTATTG > Zika virus 1 LA

TCAGTTCATGGCTCCCAGCACAGTGGGATGATTGTTAATGACACAGGACATGAAACTGATGAGAATAGAG

Group 3 Samples:

> Measles virus 1 New York

GGCTGTTAGAGGTTGTTCAGAGTGACCAGTCACAATCTGGCCTTACCTTCGCATCAAGAGGTACCAACAT > Zika virus 1 Cheyenne

GGGAAGCTCAACGAGCCAAAAAGTCATATACTTGGTCATGATACTGCTGATTGCCCCGGCATACAGCATC
> SARS virus strain 1 Sacramento

GTGAAGTCTTCATCGCTCAAAGCAAGGGACTTTACCGTCAGTGTATACGTGGCAAGGAGCAGCTGCAACT
> Influenza A virus 2 Bismark

AGGTGCATAGGAGTCAGCAATAGGGACTTTGTGGAAGGTATGTCAGGTGGGACTTGGGTTGATGTCGTCT > SARS virus strain 2 Las Vegas

TTACATATGCATCTGCACTCTGGGAAATCCAGCAAGTTGTTGATGCGGATAGCAAGATTGTTCAACTTAG
> Influenza A virus 1 LA

Group 4 Samples:

> SARS virus strain 2 sacramento

AACAAGGCACTCGAAATGTGCATTGATCAAGTCACTATCGCTGGCGCAAAGTTGCGATCACTTAG > Zika virus 1 Miami

GGGATGAATAAGTGTTATATACAGATCATGGATCTTGGACACATGTGTGATGCCACCATGAGCTATGAAT
> Measles virus 2 Miami

GAGCTATGCCATGGGAGTAGGAGTGGAACTTGAAAACTCCATGGGAGGTTTGAACTTTGGTCGATCTTAC
> SARS virus strain 1 Sante Fe

TATTCTCATGACAGCTCGCACTGTTTATGATGATGCTGCTAGACGTGTTTGGACACTGATGAATGTCATT > Zika virus 1 Dallas

TGGAACATGGAGGTTGTCACCGTAATGGCACAGGACAAACCGACTGTCGACATAGAGCTGGTTACAAC > Influenza A virus 1 Salt lake city

AAAAATCTACAAAACTTATTTTGAAAAAGTCGAAAGGTTAAAACATGGAACCTTTGGCCCTGTCCATTTT > SARS virus strain 1 LA

GTATACGGCATGCTCTCATGCAGCTGTTGATGCCCTATGTGAAAAGGCATTAAAATATTTTGCCCATAGAT

Group 5 Samples:

> Zika virus 1 Raleigh

TGGGAGTGCATACTATATGTACTTGGACAGAAACGATGCTGGGGAGGCCATATCTTTTCCAACCACATTG
> Measles virus 1 Miami

GCTACAGAGAAACCGGGTCCAGCAGAGCAAGTGATGCGAGAGCTGCCCATCCTCCAACCAGCATGCCCCT > SARS virus strain 2 LA

TCTTTGGAGTACAAAGCCAGTAGATACTTCAAATTCATTTGAAGTTCTGGCAGTAGAAGACACACAAGGA
> Influenza A virus 1 Sante fe

ATGTTAGAGAGAGACTAGTCCGCAAAACGAGATTCCTCCCAGTTGCTGGTGGAACAAGCAGTGTGTACA
> SARS virus strain 1 Chicago

CCTCTACTTTGACAAGGCTGGTCAAAAGACCTATGAGAGACATCCGCTCTCCCATTTTGTCAATTTAGAC
> Influenza A virus 1 Atlanta

CCCGTCACTTAGGATGAAATGGATGATGGCAATGAAATATCCAATTACAGCAGACAAAAGGATAACGGAA
> SARS virus strain 1 Seattle

 $\tt TTTGTCCGTATCCAACCTGGTCAAACATTTTCAGTTCTAGCATGCTACAATGGTTCACCATCTGGTGTTT$

Group 6 samples:

> Influenza A virus 1 Washington

TACTCACAAAAACCACCGTGGACCATATGGCCATAATCAAGAAATACACATCAGGAAGACAGGAAAAGAA
> SARS virus strain 1 Las Vegas

TGGATTCATATTACTCATTGCTGATGCCCATCCTCACTTTGACTAGGGCATTGGCTGCTGAGTCCCATAT
> Zika virus 2 New York

TTAGAGTCGAAAATTGGATATTCAGGAACCCTGGTTTCGCTTTAGCAGCAGCTGCCATCGCTTTGCTTTT
> Measles virus 1 Atlanta

GGTCAAGGACGTGCTGACACCACTCTTCAAGATCATTGGTGATGAAGTGGGCCTGAGGACACCTCAGAGA
> Influenza A virus 1 Seattle

CCACTAGCATCTTTATTGGAGATGTGCCACAGCACACAGATTGGTGGAACAAGGATGGTGGACATTCTTA
> SARS virus strain 1 LA

AATGCTAGTTAAACAAGGAGATGATTACGTGTACCTGCCTTACCCAGATCCATCAAGAATATTAGGCGCA > Zika virus 1 sacrameto

CATTCCACTAGGAAGCTGCAAACGCGGTCGCAAACCTGGTTGGAATCAAGAGAATACACAAAGCACTTGA

Group 7 Samples:

> Influenza A virus 2 Sacramento

ACGGGCAATCTTCAAACATTGAAGATAAGGGTGCATGAGGGATATGAAGAATTCACAATGGTTGGGAGAA > Zika virus 2 Wichita

GCCCTATGCTGGATGAGGGGGTGGAACCAGATGACGTCGATTGTTGGTGCAACACGACGTCAACTTGGGT
> Measles virus 1 Chicago

GTACGGGGGAACTTACCTAGTGGGAAAGCCTAATCTGAGCAGTAAAGGGTCAGAGTTGTCACAACTGAGC
> SARS virus strain 2 Salt lake city

CTGTCACCATACTTGATGGTATTTCTGAACAGTCATTACGTCTTGTCGACGCCATGGTTTATACTTCAGA
> Influenza A virus 1 Denver

AATGAGGGATGTGCTTGGGACATTTGACACCACTCAGATAATAAAACTTCTTCCCTTTGCAGCCGCTCCA
> SARS virus strain 1 Cheyenne

AAGCCTAGAGTGGAAGCACCTAAACAAGAGGAGCCACCAAACACAGAAGATTCCAAAACTGAGGAGAAAT

Group 8 Samples:

> SARS virus strain 1 LA

CATTACCAAATGCGAGTTTTGATAATTTCAAACTCACATGTTCTAACACAAAATTTGCTGATGATTTAAA
> Influenza A virus 1 Helena

CACAGGATGTAATCATGGAAGTTGTTTTCCCAAACGAAGTGGGAGCCAGAATACTAACGTCGGAGTCGCA
> Zika virus 1 Baton Rouge

AGCCGCTGCCCAACACAGGTGAAGCCTACCTTGACAAGCAATCAGACACTCAATATGTYTGCAAAAGAA > Measles virus 1 D.C.

CTCGTCAAGCTAGGTGTCTGGAAATCCCCAACCGACATGCGATCCTGGGTCCCCCTATCAACGGATGATC > Zika virus 1 Boston

 ${\tt CACTCAAGGGTGGTAAGATTGTTAGTACTTGTTTTAAACTTATGCTTAAGGCCACATTATTGTGCGTTCT}$

Group 9 Samples:

> Measles virus 1 Boston

CAAGCACTCTGCGAGAATCCCGAGTGGGCACCATTGAAGGATAACAGGATTCCTTCATACGGGGTCTTGT
> Zika virus 1 Madison

GCGCAGAAACTAGTGTCGGAATTGTTGGCCTCCTTCTGACCACAGCTATGGCAGCGGAGGTCACTAGACG > Influenza A virus 1 Nashville

TTGAAGTGTTGCATTTGACTCAAGGAACATGCTGGGAACAGATGTACACTCCAGGTGGAGAAGTGAGGAA
> SARS virus strain 2 sacramento

CGTCAAGGGTCAAATACAGGTTGCTTCAGATAACATCAAGGATTGTGTAAAATGCTTCATTGATGTTGTT > Influenza A virus 1 Austin

AGAAACCAAGTCAAAATACGCCGAAGAGTTGACATAAATCCTGGCCATGCAGACCTCAGTGCCAAGGAGG > SARS virus strain_1_LA

GGAGTTTTCTGTGGTGTTGATGCGATGAATCTCATAGCTAACATCTTTACTCCTCTTGTGCAACCTGTGG
> Measles virus 1 LA

AGCCCTCTGTCACAGGGAAGATTCTATCACAATTCCCTATCAGGGGTCAGGGAAAGGTGTCAGCTTCCAG

Group 10 samples:

> SARS virus strain 2 patient Santa fe

TTTGACACTTTCAAAGGGGAATGCCCAAAGTTTGTGTTTCCTCTTAACTCAAAAGTCAAAGTCATTCAAC
> Influenza A virus 1 Des Moines

TGATGGTATCACCTCTGGCTGTGACATGGTGGAATAGAAATGGACCAATGACAAGTACAATTCATTATCC > Measles virus 1 LA

CGGTTCAGGGATGGACCTATACAAAACCAACCACAACAATGTGTATTGGCTGACTATCCCGCCAATGAAG
> Zika virus 1 Dallas

AACAGTCAGCAACATGGCGGAGGTAAGATCCTACTGCTATGAGGCATCAATATCAGACATGGCTTCGGAC > Measles virus 1 Chicago

TGGCATCCGAACTCGGTATCACTGCCGAGGATGCAAGGCTTGTTTCAGAGATTGCAATGCATACTACTGA
> SARS virus strain 1 patient seattle

GGCAGAACCCAACAGAAGAACAAGCCGTGGATATATGCAAGGCTGCAATGGGACTGAGAATCAGCTCATC