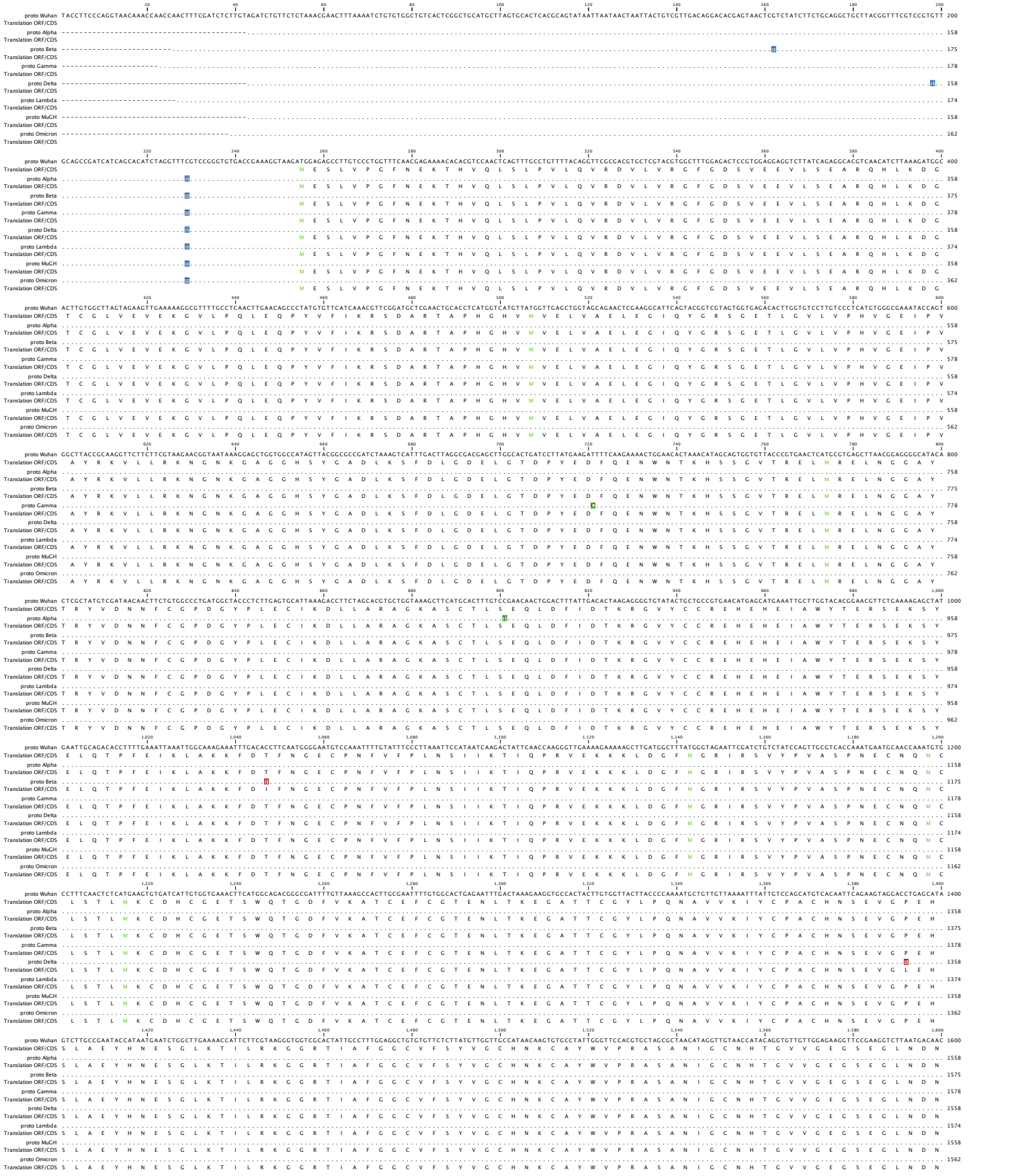
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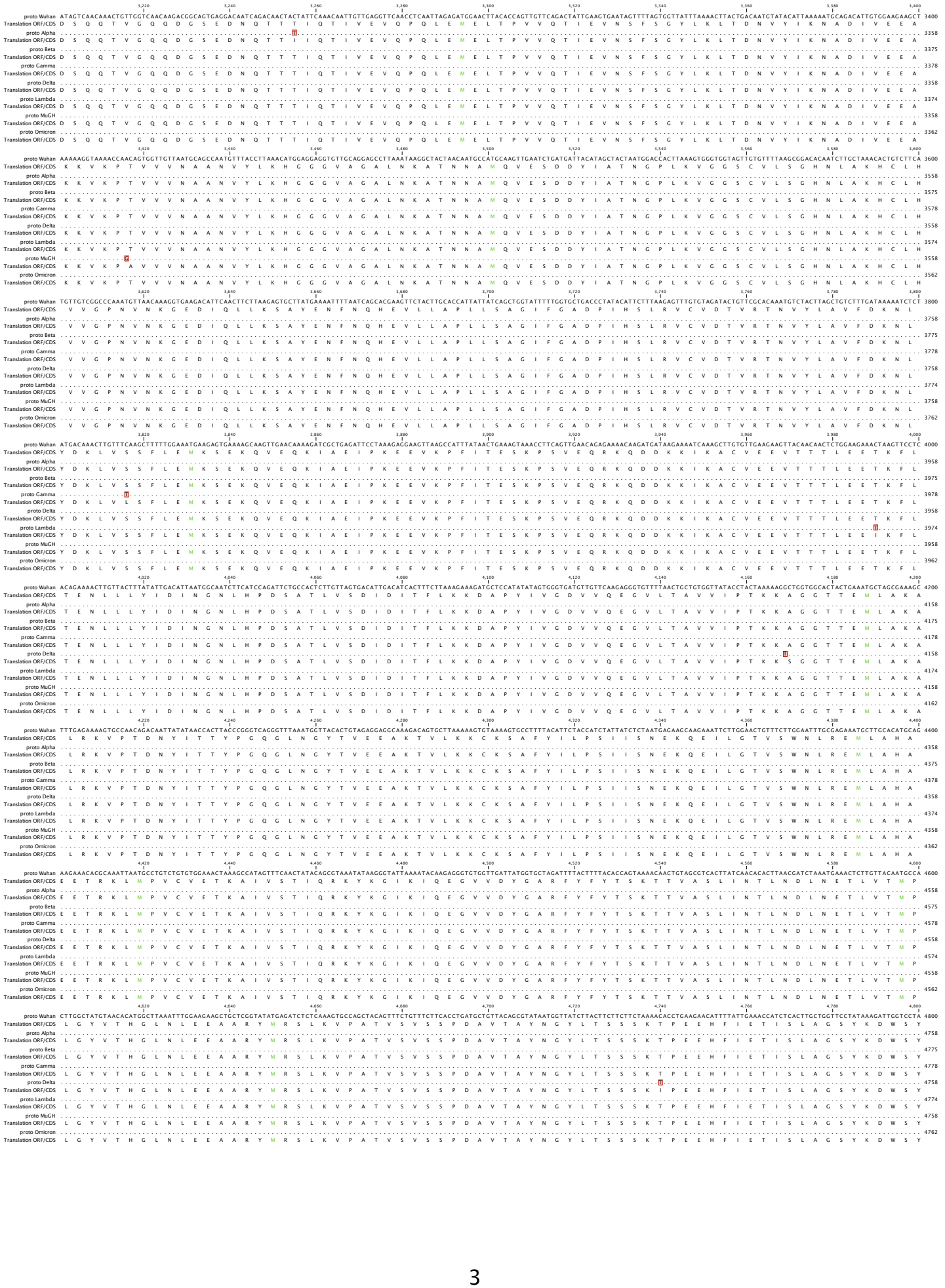
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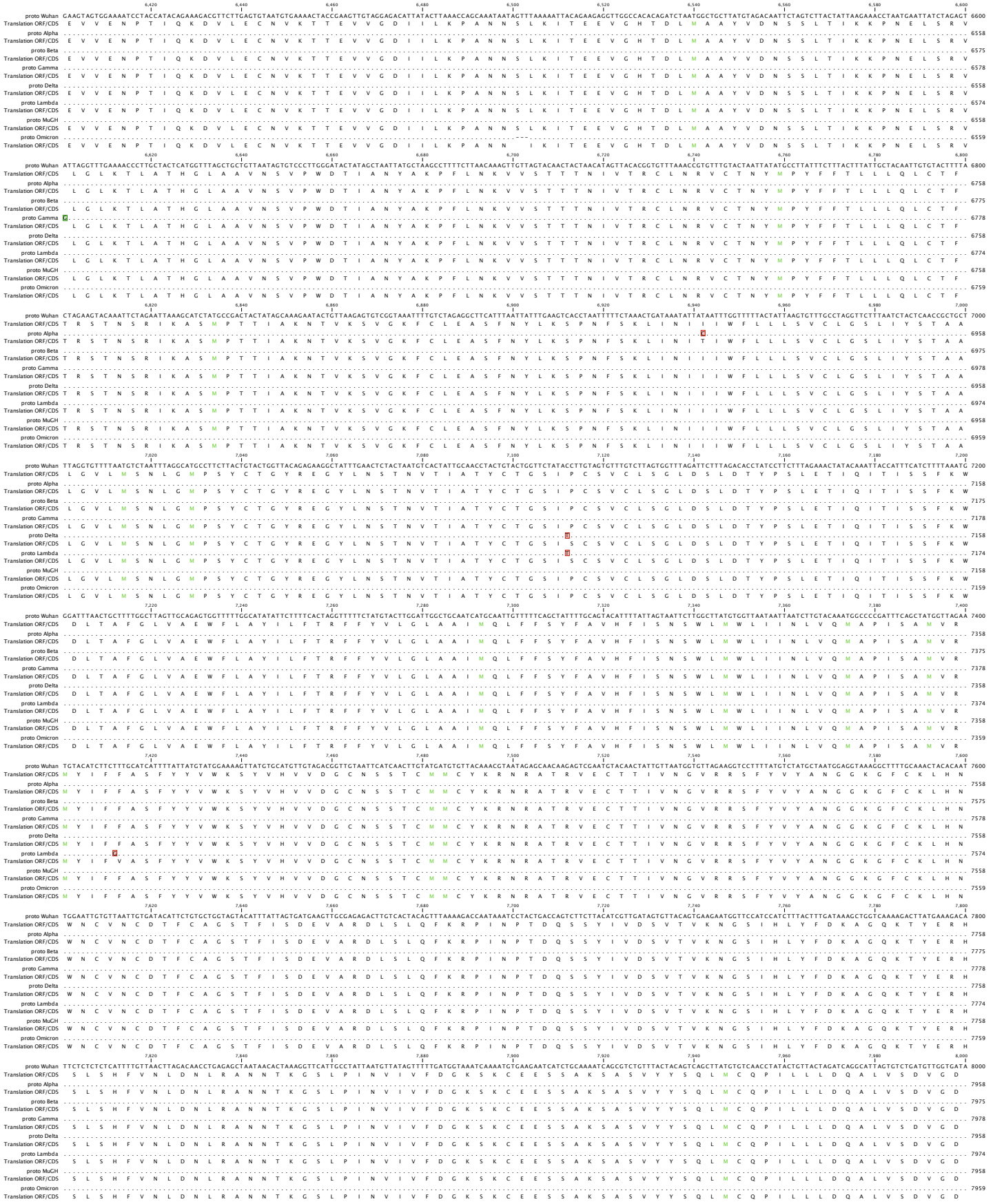
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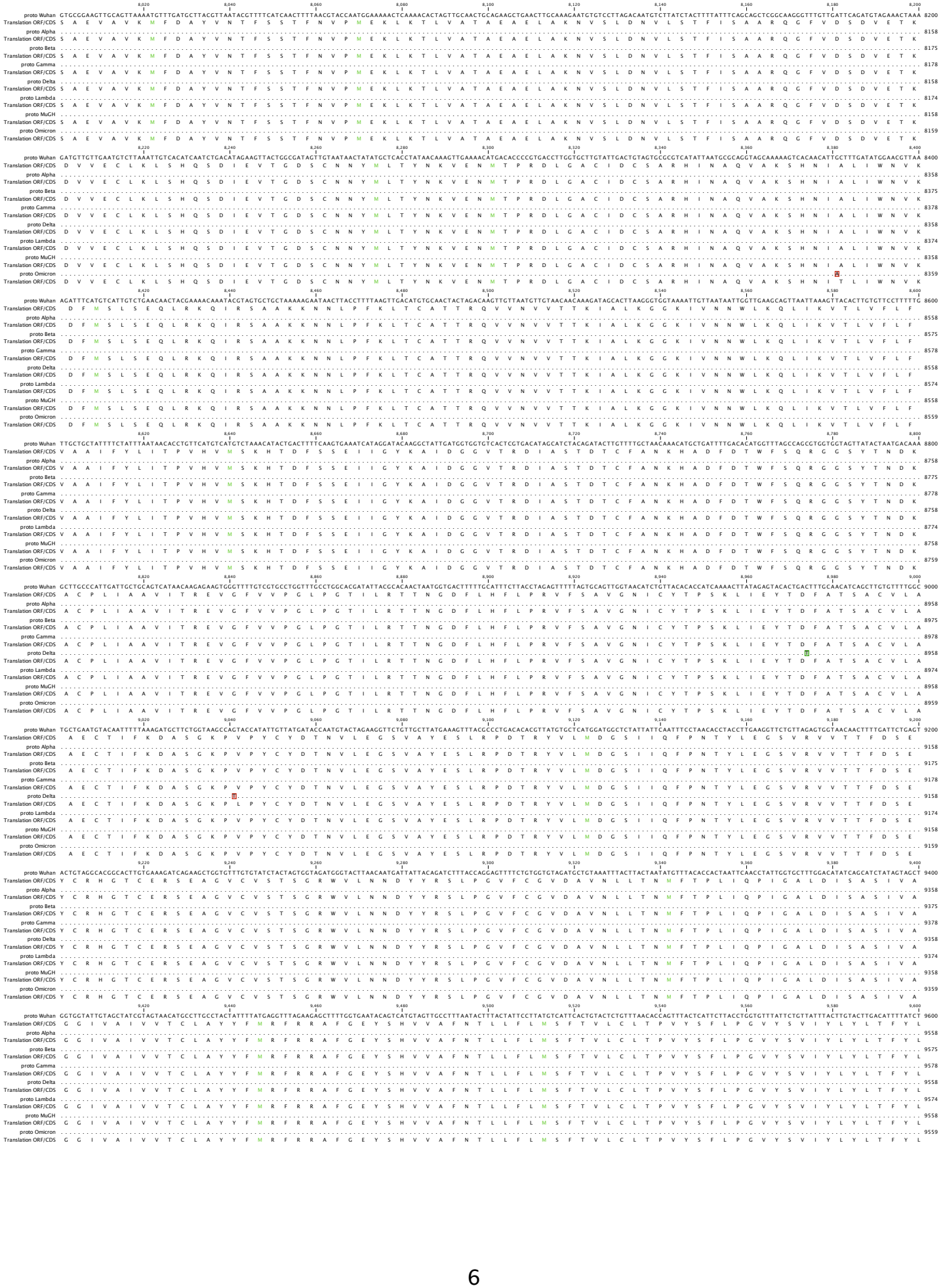
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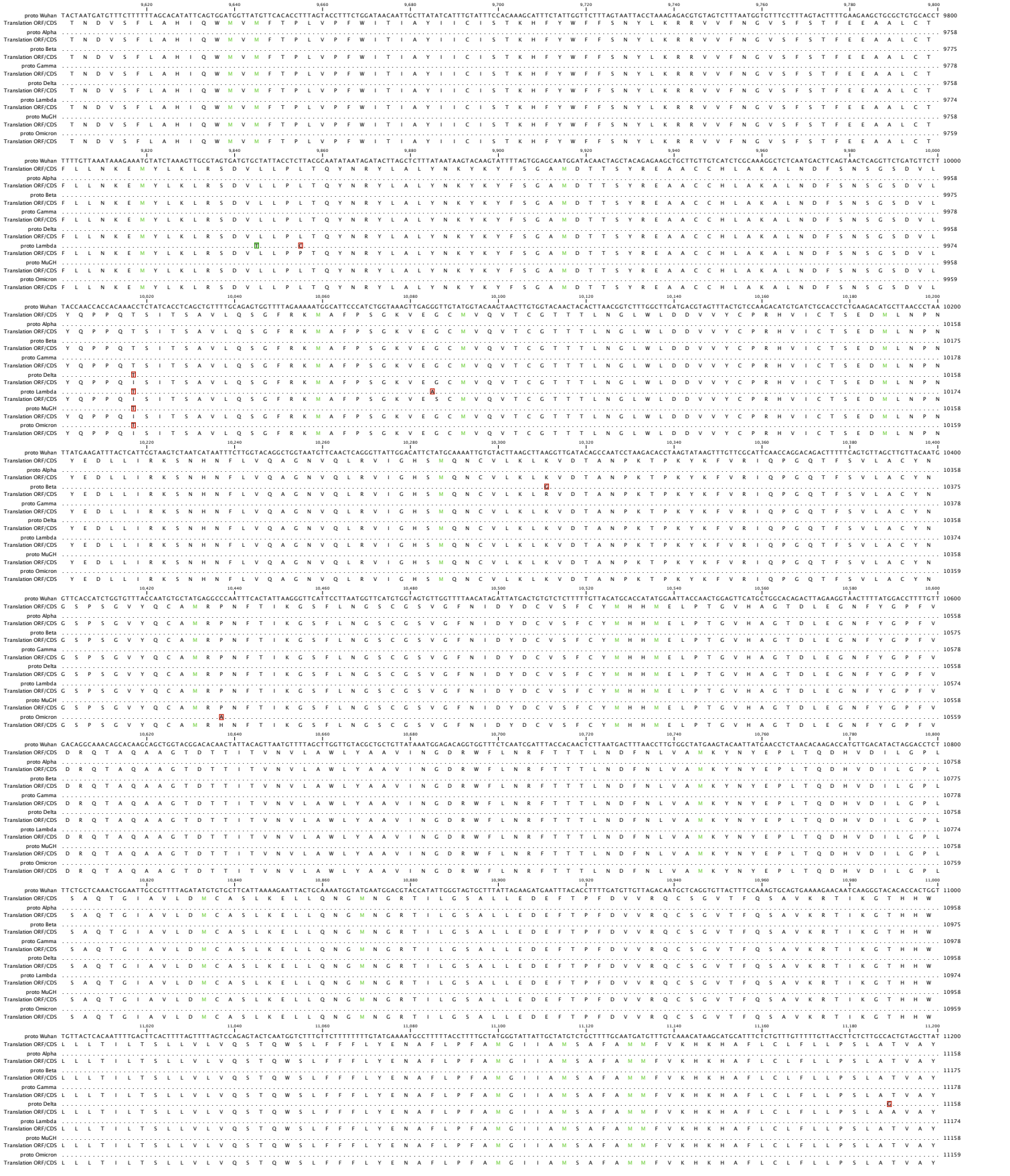
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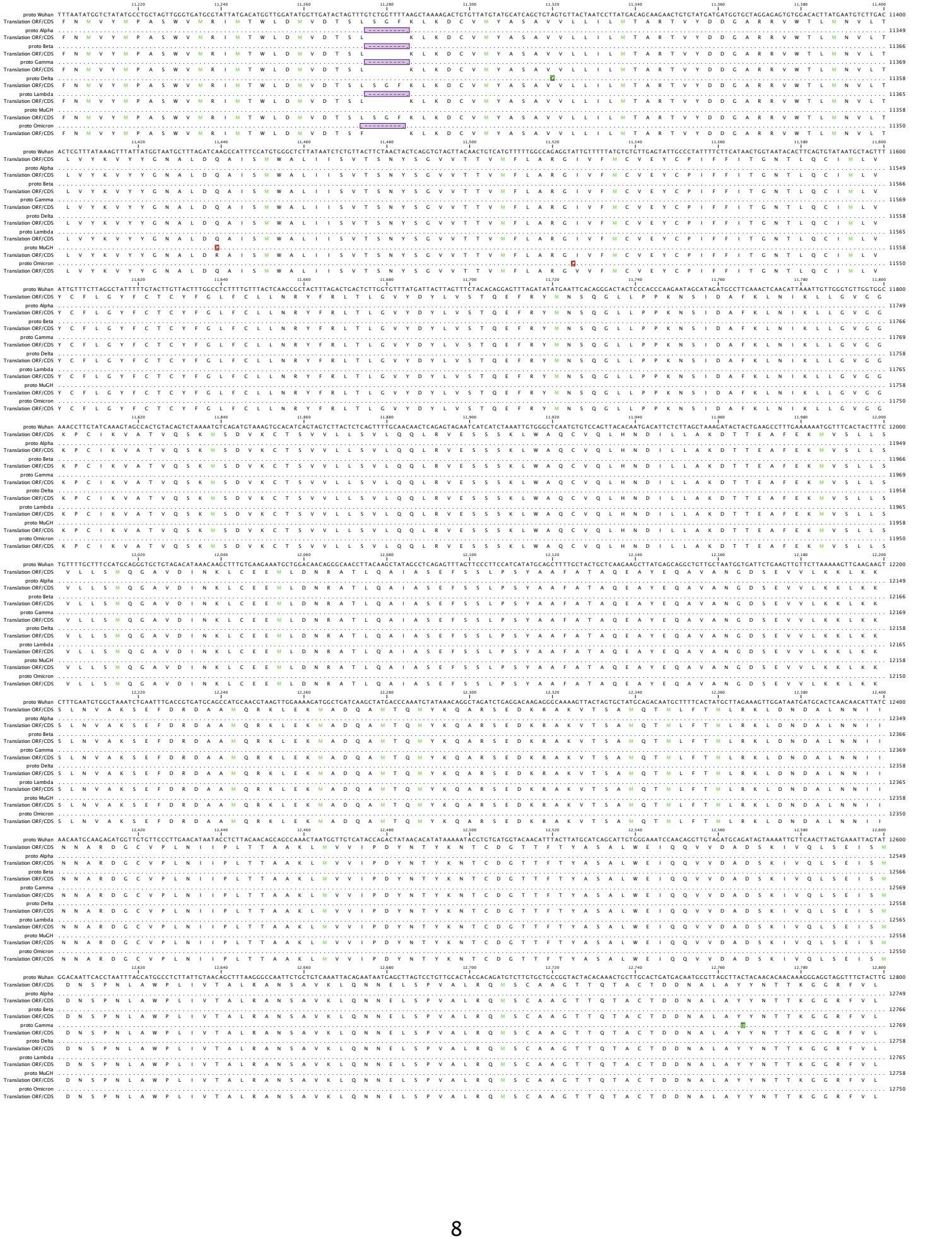
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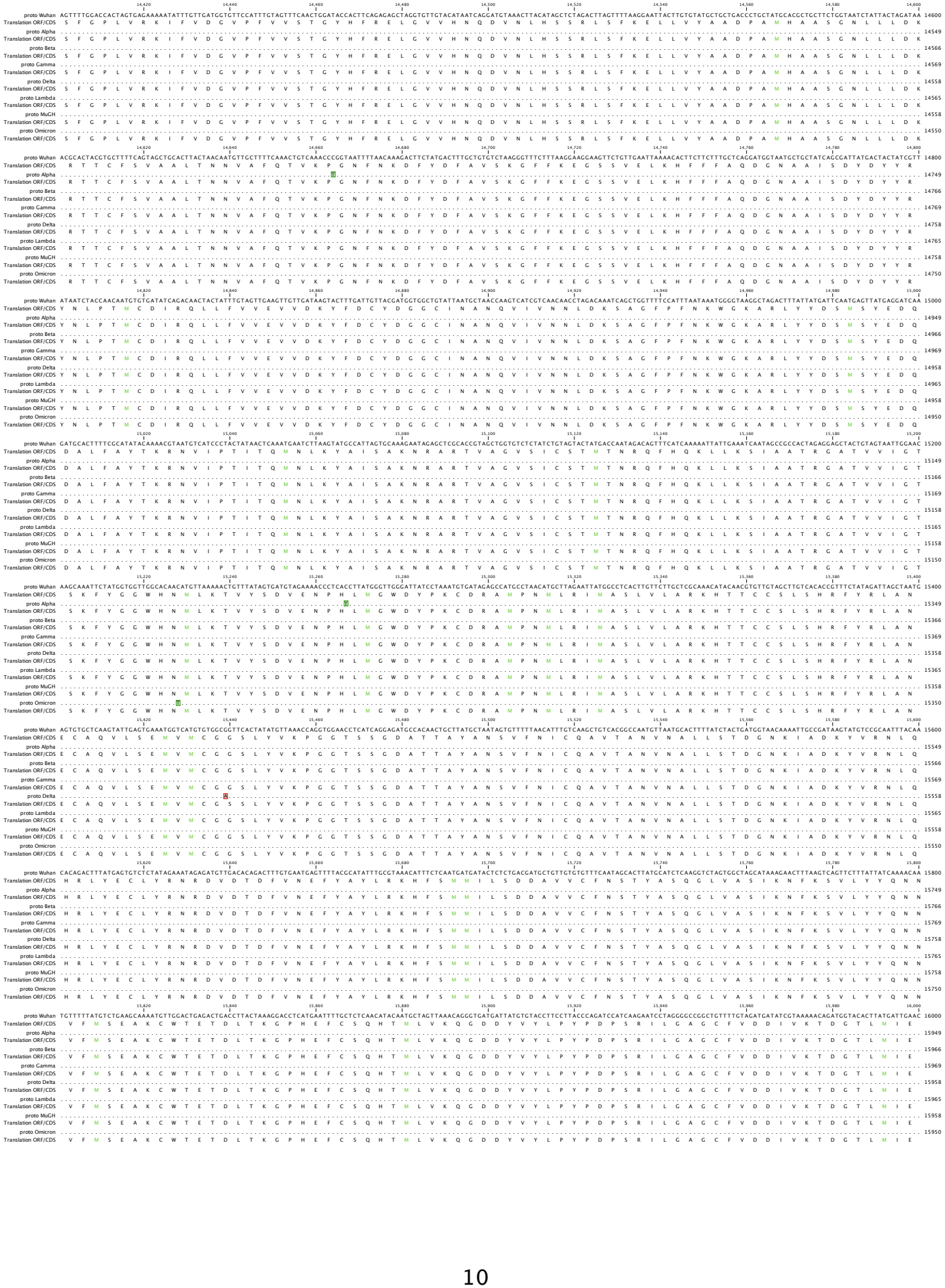
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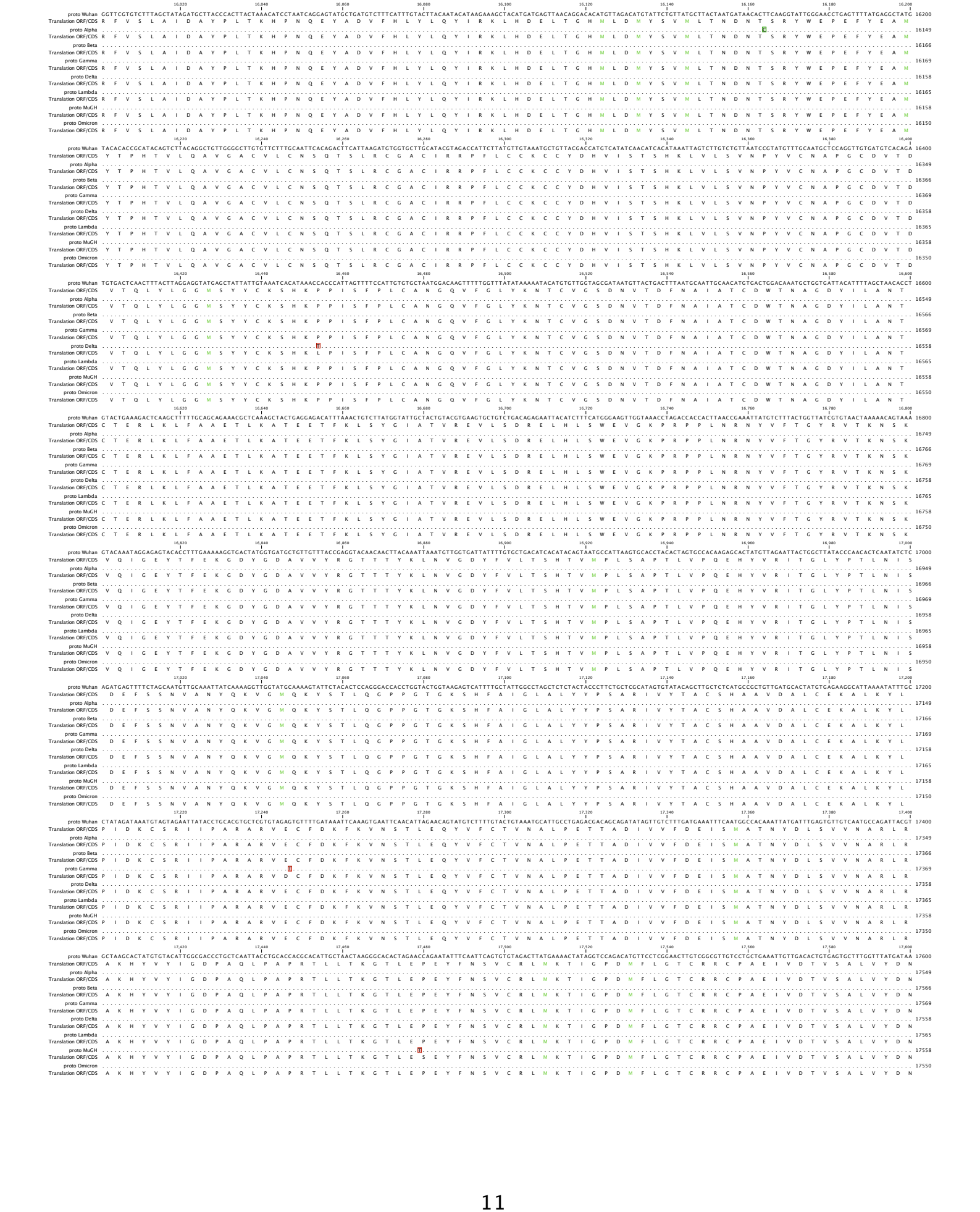
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proto Wuhan
Translation ORF/CDS
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proto Gamma
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19,220 19,240 19,260 19,280 19,300 19,320 19,340 19,360 19,380 19,400
proto Wuhan TATCCTGCTAATTCCATTGTTTGTAGATTTGACACTAGAGTGCTATCTAACCTTAACTTGCCTGGTTGTGATGGTGGCAGTTTGTATGTAAATAAACATGCATTCCACACACCAGCTTTTGATAAAAGTGCTTTTGTTAATTTAAAACAATTACCATTTTTCTATTACTCTGACAGTCCATGTGAGTCTCATGGAAAACA 19400
Translation ORF/CDS Y P A N S I V C R F D T R V L S N L N L P G C D G G S L Y V N K H A F H T P A F D K S A F V N L K Q L P F F Y Y S D S P C E S H G K Q
proto Alpha ........................................................................................................................................................................................................ 19349
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proto Beta ........................................................................................................................................................................................................ 19366
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proto Gamma ........................................................................................................................................................................................................ 19369
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proto Delta .......T................................................................................................................................................................................................ 19358
Translation ORF/CDS Y P V N S I V C R F D T R V L S N L N L P G C D G G S L Y V N K H A F H T P A F D K S A F V N L K Q L P F F Y Y S D S P C E S H G K Q
proto Lambda ........................................................................................................................................................................................................ 19365
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proto Omicron ........................................................................................................................................................................................................ 19350
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Translation ORF/CDS V V S D I D Y V P L K S A T C I T R C N L G G A V C R H H A N E Y R L Y L D A Y N M M I S A G F S L W V Y K Q F D T Y N L W N T F T
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proto Beta ........................................................................................................................................................................................................ 19566
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proto Gamma ........................................................................................................................................................................................................ 19569
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proto Delta ........................................................................................................................................................................................................ 19558
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proto Lambda ........................................................................................................................................................................................................ 19565
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19,620 19,640 19,660 19,680 19,700 19,720 19,740 19,760 19,780 19,800
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Translation ORF/CDS R L Q S L E N V A F N V V N K G H F D G Q Q G E V P V S I I N N T V Y T K V D G V D V E L F E N K T T L P V N V A F E L W A K R N I K
proto Alpha ........................................................................................................................................................................................................ 19749
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proto Beta ........................................................................................................................................................................................................ 19766
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proto Gamma ........................................................................................................................................................................................................ 19769
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proto Delta ........................................................................................................................................................................................................ 19758
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proto Lambda ........................................................................................................................................................................................................ 19765
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proto MuGH ........................................................................................................................................................................................................ 19758
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proto Omicron ........................................................................................................................................................................................................ 19750
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19,820 19,840 19,860 19,880 19,900 19,920 19,940 19,960 19,980 20,000
proto Wuhan CCAGTACCAGAGGTGAAAATACTCAATAATTTGGGTGTGGACATTGCTGCTAATACTGTGATCTGGGACTACAAAAGAGATGCTCCAGCACATATATCTACTATTGGTGTTTGTTCTATGACTGACATAGCCAAGAAACCAACTGAAACGATTTGTGCACCACTCACTGTCTTTTTTGATGGTAGAGTTGATGGTCAAGT 20000
Translation ORF/CDS P V P E V K I L N N L G V D I A A N T V I W D Y K R D A P A H I S T I G V C S M T D I A K K P T E T I C A P L T V F F D G R V D G Q V
proto Alpha ........................................................................................................................................................................................................ 19949
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proto Gamma ........................................................................................................................................................................................................ 19969
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proto Delta ........................................................................................................................................................................................................ 19958
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proto Lambda ........................................................................................................................................................................................................ 19965
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proto MuGH ........................................................................................................................................................................................................ 19958
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proto Omicron ........................................................................................................................................................................................................ 19950
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20,020 20,040 20,060 20,080 20,100 20,120 20,140 20,160 20,180 20,200
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Translation ORF/CDS D L F R N A R N G V L I T E G S V K G L Q P S V G P K Q A S L N G V T L I G E A V K T Q F N Y Y K K V D G V V Q Q L P E T Y F T Q S
proto Alpha ........................................................................................................................................................................................................ 20149
Translation ORF/CDS D L F R N A R N G V L I T E G S V K G L Q P S V G P K Q A S L N G V T L I G E A V K T Q F N Y Y K K V D G V V Q Q L P E T Y F T Q S
proto Beta ........................................................................................................................................................................................................ 20166
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proto Gamma ........................................................................................................................................................................................................ 20169
Translation ORF/CDS D L F R N A R N G V L I T E G S V K G L Q P S V G P K Q A S L N G V T L I G E A V K T Q F N Y Y K K V D G V V Q Q L P E T Y F T Q S
proto Delta ........................................................................................................................................................................................................ 20158
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proto Lambda ........................................................................................................................................................................................................ 20165
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proto MuGH .......................................................................................................................................T................................................................ 20158
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20,220 20,240 20,260 20,280 20,300 20,320 20,340 20,360 20,380 20,400
proto Wuhan GAAATTTACAAGAATTTAAACCCAGGAGTCAAATGGAAATTGATTTCTTAGAATTAGCTATGGATGAATTCATTGAACGGTATAAATTAGAAGGCTATGCCTTCGAACATATCGTTTATGGAGATTTTAGTCATAGTCAGTTAGGTGGTTTACATCTACTGATTGGACTAGCTAAACGTTTTAAGGAATCACCTTTTGAA 20400
Translation ORF/CDS R N L Q E F K P R S Q M E I D F L E L A M D E F I E R Y K L E G Y A F E H I V Y G D F S H S Q L G G L H L L I G L A K R F K E S P F E
proto Alpha ........................................................................................................................................................................................................ 20349
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proto Beta ........................................................................................................................................................................................................ 20366
Translation ORF/CDS R N L Q E F K P R S Q M E I D F L E L A M D E F I E R Y K L E G Y A F E H I V Y G D F S H S Q L G G L H L L I G L A K R F K E S P F E
proto Gamma ........................................................................................................................................................................................................ 20369
Translation ORF/CDS R N L Q E F K P R S Q M E I D F L E L A M D E F I E R Y K L E G Y A F E H I V Y G D F S H S Q L G G L H L L I G L A K R F K E S P F E
proto Delta ........................................................................................................................................................................................................ 20358
Translation ORF/CDS R N L Q E F K P R S Q M E I D F L E L A M D E F I E R Y K L E G Y A F E H I V Y G D F S H S Q L G G L H L L I G L A K R F K E S P F E
proto Lambda ........................................................................................................................................................................................................ 20365
Translation ORF/CDS R N L Q E F K P R S Q M E I D F L E L A M D E F I E R Y K L E G Y A F E H I V Y G D F S H S Q L G G L H L L I G L A K R F K E S P F E
proto MuGH ........................................................................................................................................................................................................ 20358
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proto Omicron ........................................................................................................................................................................................................ 20350
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20,420 20,440 20,460 20,480 20,500 20,520 20,540 20,560 20,580 20,600
proto Wuhan TTAGAAGATTTTATTCCTATGGACAGTACAGTTAAAAACTATTTCATAACAGATGCGCAAACAGGTTCATCTAAGTGTGTGTGTTCTGTTATTGATTTATTACTTGATGATTTTGTTGAAATAATAAAATCCCAAGATTTATCTGTAGTTTCTAAGGTTGTCAAAGTGACTATTGACTATACAGAAATTTCATTTATGCT 20600
Translation ORF/CDS L E D F I P M D S T V K N Y F I T D A Q T G S S K C V C S V I D L L L D D F V E I I K S Q D L S V V S K V V K V T I D Y T E I S F M L
proto Alpha ........................................................................................................................................................................................................ 20549
Translation ORF/CDS L E D F I P M D S T V K N Y F I T D A Q T G S S K C V C S V I D L L L D D F V E I I K S Q D L S V V S K V V K V T I D Y T E I S F M L
proto Beta ........................................................................................................................................................................................................ 20566
Translation ORF/CDS L E D F I P M D S T V K N Y F I T D A Q T G S S K C V C S V I D L L L D D F V E I I K S Q D L S V V S K V V K V T I D Y T E I S F M L
proto Gamma ........................................................................................................................................................................................................ 20569
Translation ORF/CDS L E D F I P M D S T V K N Y F I T D A Q T G S S K C V C S V I D L L L D D F V E I I K S Q D L S V V S K V V K V T I D Y T E I S F M L
proto Delta ........................................................................................................................................................................................................ 20558
Translation ORF/CDS L E D F I P M D S T V K N Y F I T D A Q T G S S K C V C S V I D L L L D D F V E I I K S Q D L S V V S K V V K V T I D Y T E I S F M L
proto Lambda ........................................................................................................................................................................................................ 20565
Translation ORF/CDS L E D F I P M D S T V K N Y F I T D A Q T G S S K C V C S V I D L L L D D F V E I I K S Q D L S V V S K V V K V T I D Y T E I S F M L
proto MuGH ........................................................................................................................................................................................................ 20558
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proto Omicron ........................................................................................................................................................................................................ 20550
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20,620 20,640 20,660 20,680 20,700 20,720 20,740 20,760 20,780 20,800
proto Wuhan TTGGTGTAAAGATGGCCATGTAGAAACATTTTACCCAAAATTACAATCTAGTCAAGCGTGGCAACCGGGTGTTGCTATGCCTAATCTTTACAAAATGCAAAGAATGCTATTAGAAAAGTGTGACCTTCAAAATTATGGTGATAGTGCAACATTACCTAAAGGCATAATGATGAATGTCGCAAAATATACTCAACTGTGTC 20800
Translation ORF/CDS W C K D G H V E T F Y P K L Q S S Q A W Q P G V A M P N L Y K M Q R M L L E K C D L Q N Y G D S A T L P K G I M M N V A K Y T Q L C
proto Alpha ........................................................................................................................................................................................................ 20749
Translation ORF/CDS W C K D G H V E T F Y P K L Q S S Q A W Q P G V A M P N L Y K M Q R M L L E K C D L Q N Y G D S A T L P K G I M M N V A K Y T Q L C
proto Beta ........................................................................................................................................................................................................ 20766
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proto Gamma ........................................................................................................................................................................................................ 20769
Translation ORF/CDS W C K D G H V E T F Y P K L Q S S Q A W Q P G V A M P N L Y K M Q R M L L E K C D L Q N Y G D S A T L P K G I M M N V A K Y T Q L C
proto Delta ........................................................................................................................................................................................................ 20758
Translation ORF/CDS W C K D G H V E T F Y P K L Q S S Q A W Q P G V A M P N L Y K M Q R M L L E K C D L Q N Y G D S A T L P K G I M M N V A K Y T Q L C
proto Lambda ........................................................................................................................................................................................................ 20765
Translation ORF/CDS W C K D G H V E T F Y P K L Q S S Q A W Q P G V A M P N L Y K M Q R M L L E K C D L Q N Y G D S A T L P K G I M M N V A K Y T Q L C
proto MuGH ........................................................................................................................................................................................................ 20758
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proto Omicron ........................................................................................................................................................................................................ 20750
Translation ORF/CDS W C K D G H V E T F Y P K L Q S S Q A W Q P G V A M P N L Y K M Q R M L L E K C D L Q N Y G D S A T L P K G I M M N V A K Y T Q L C
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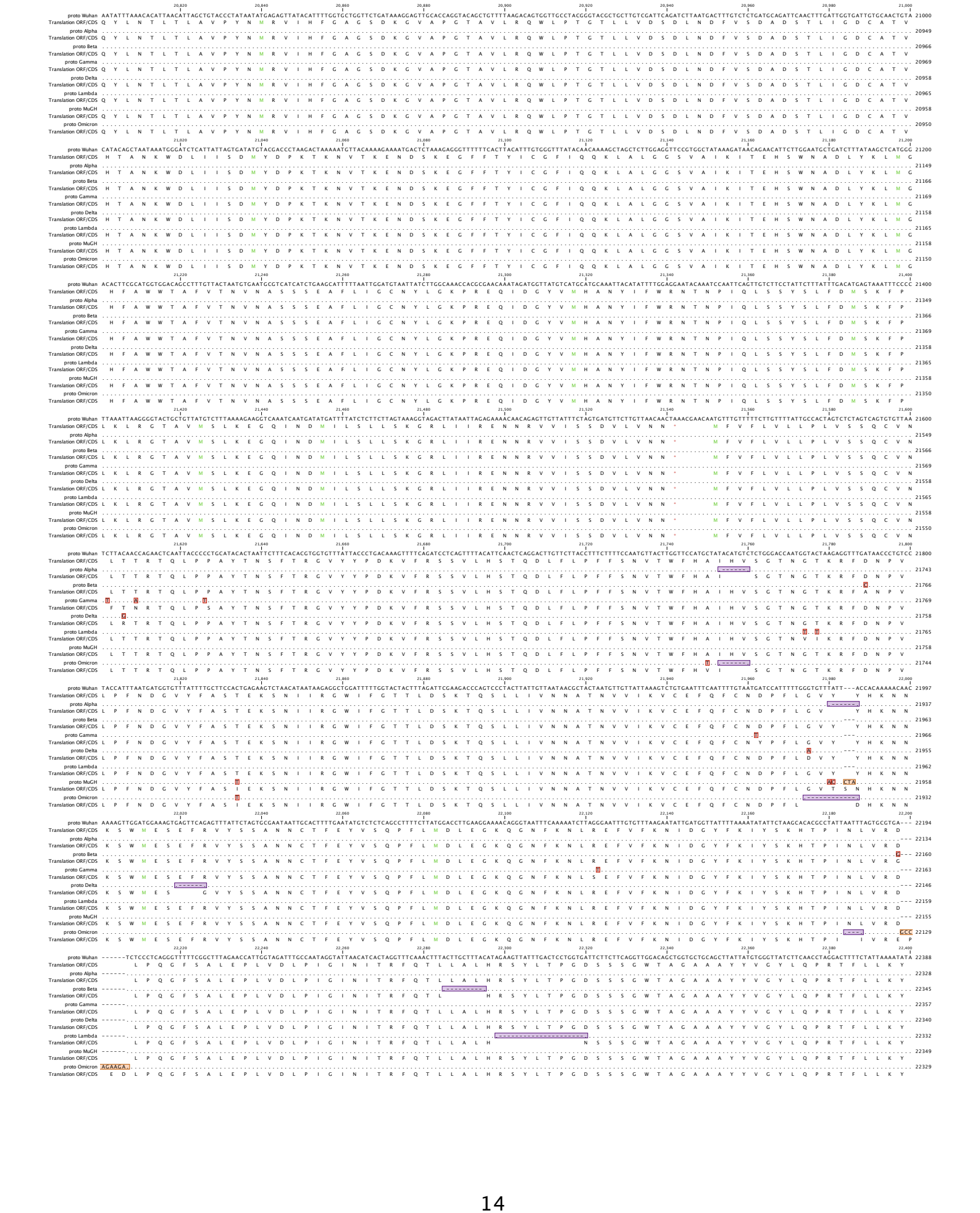
proto Wuhan
Translation ORF/CDS
proto Alpha
proto Beta
proto Gamma
proto Delta
proto Lambda
proto MuGH
proto Omicron

proto Wuhan
Translation ORF/CDS
proto Alpha
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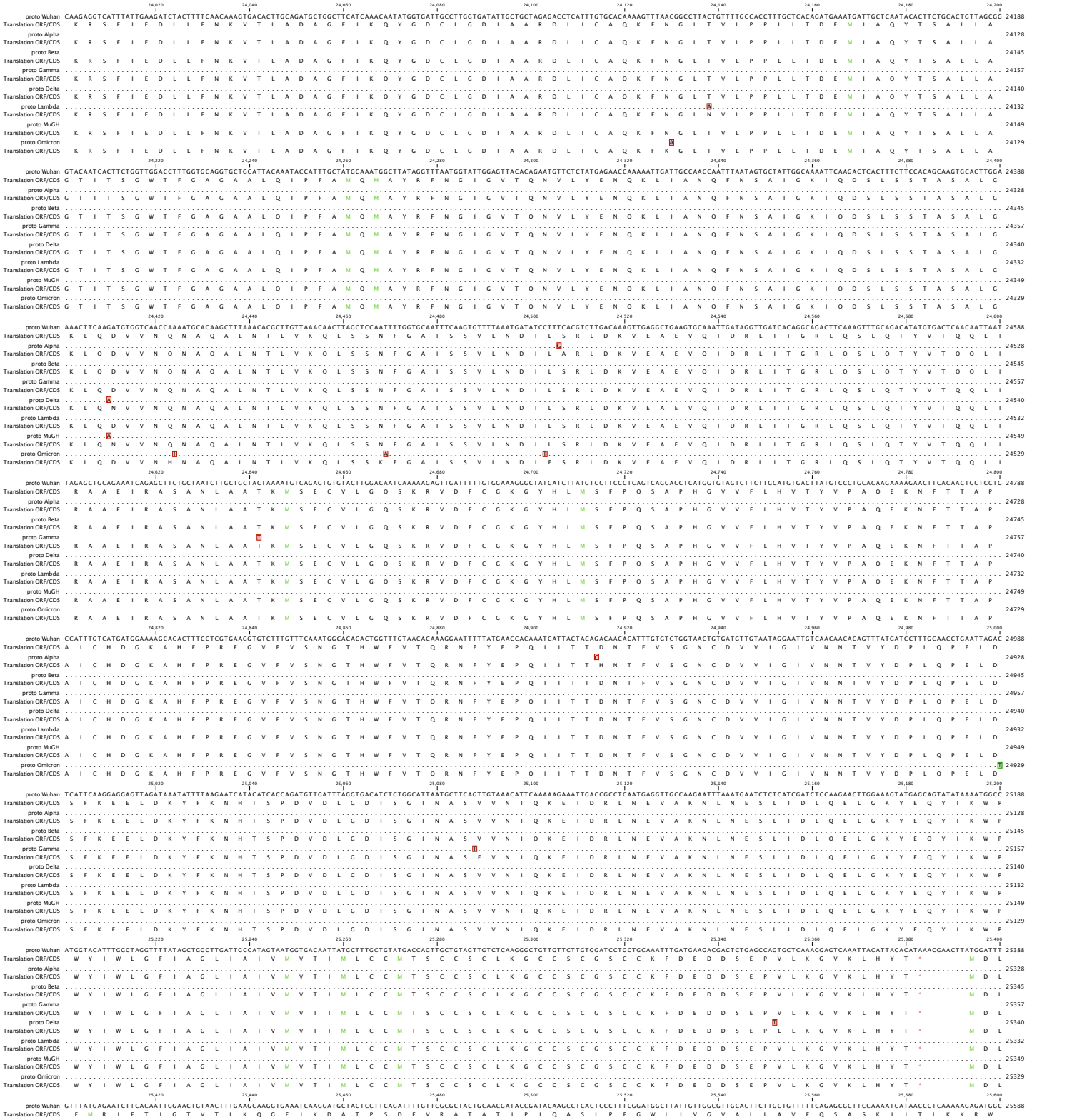
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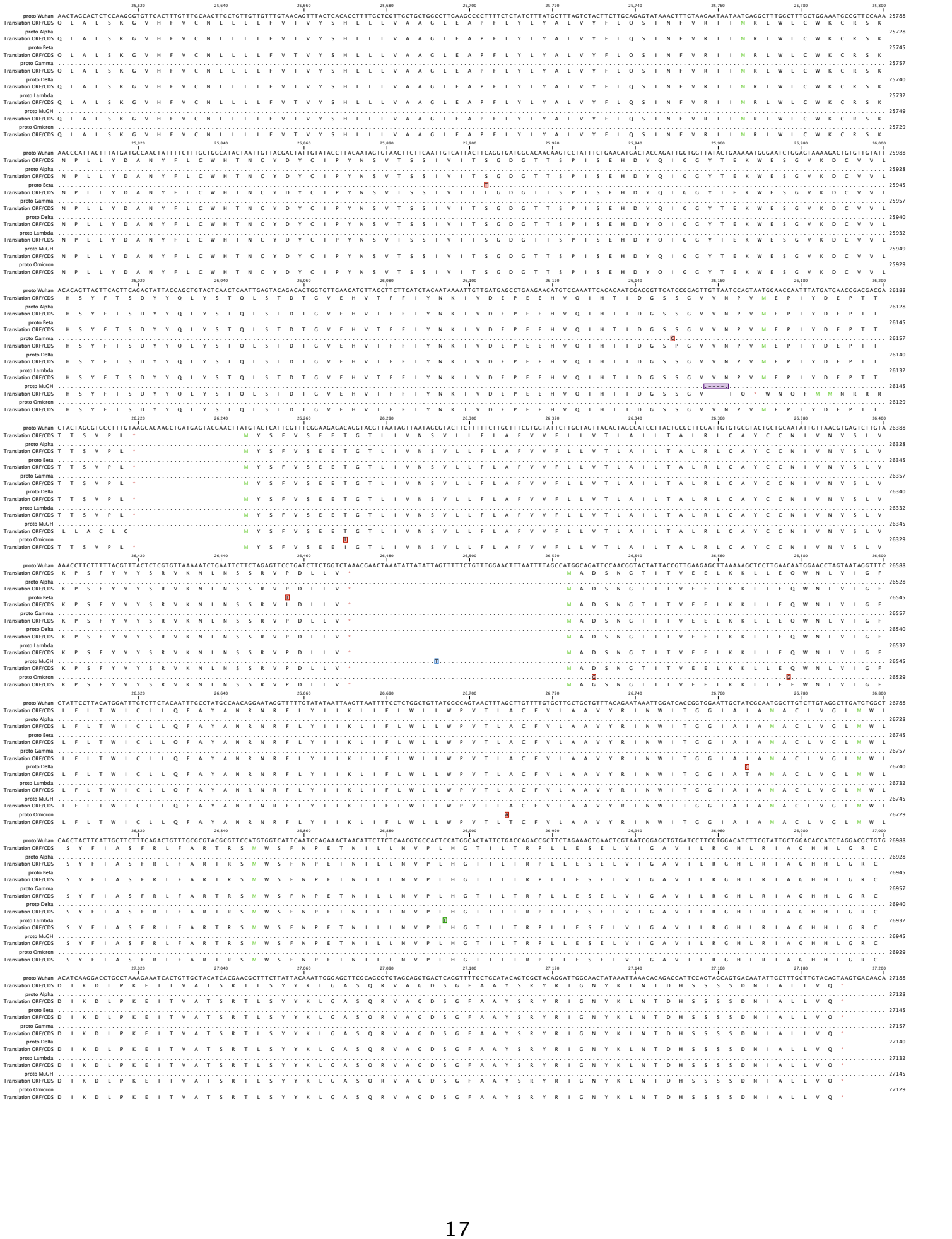
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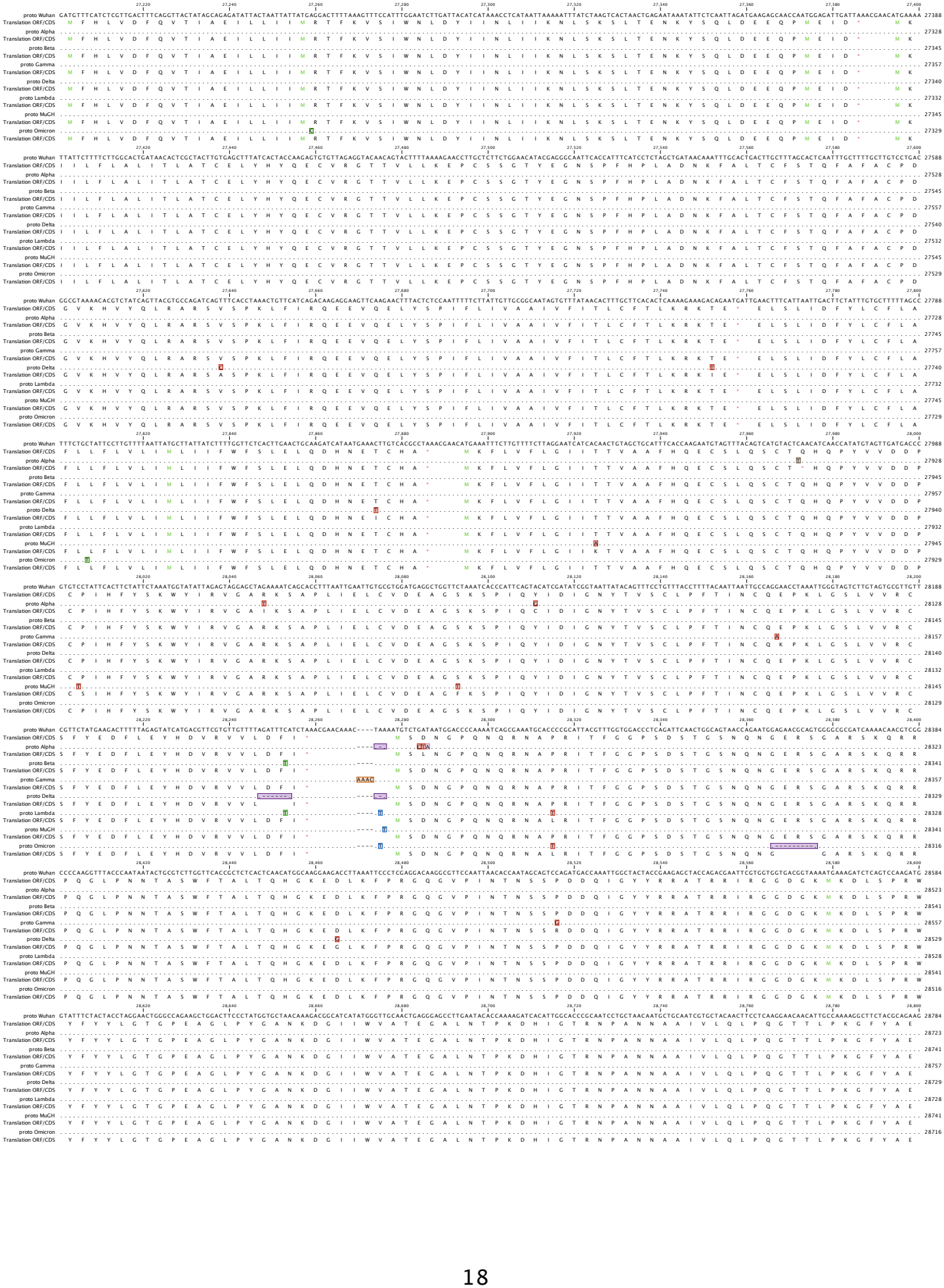
proto Wuhan
Translation ORF/CDS
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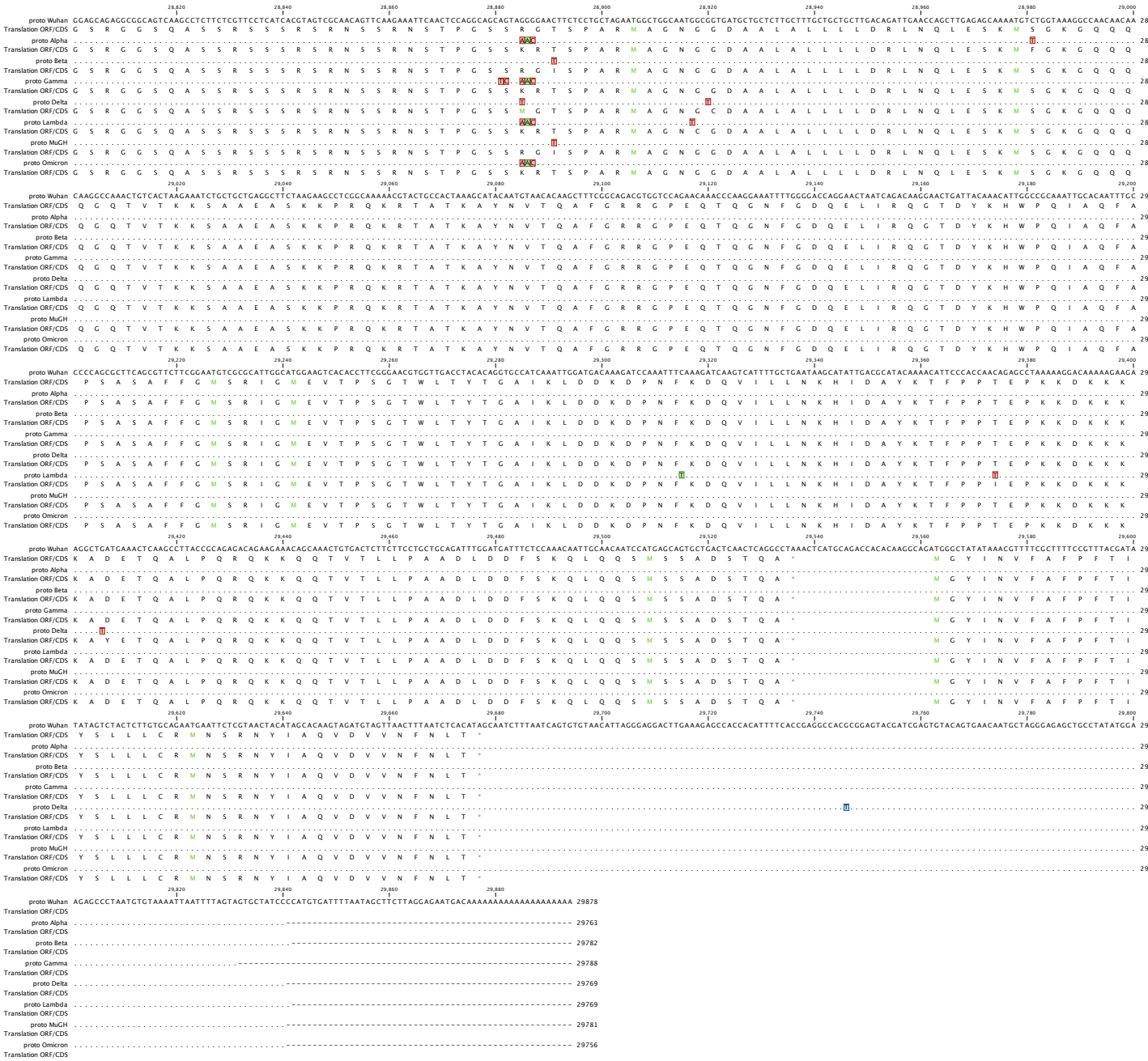
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