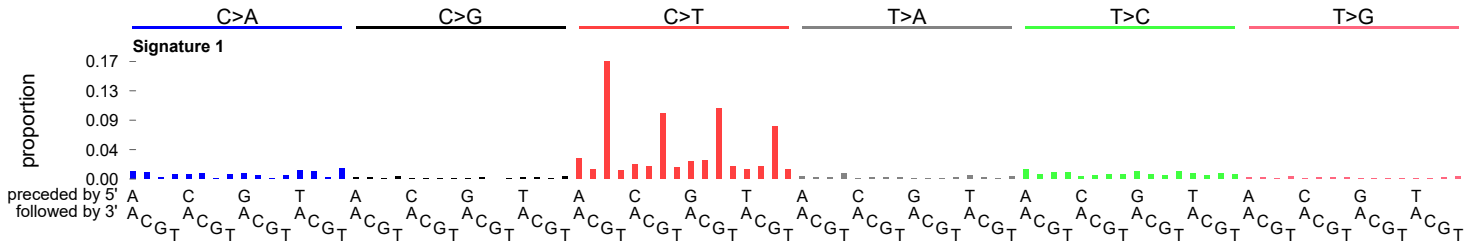
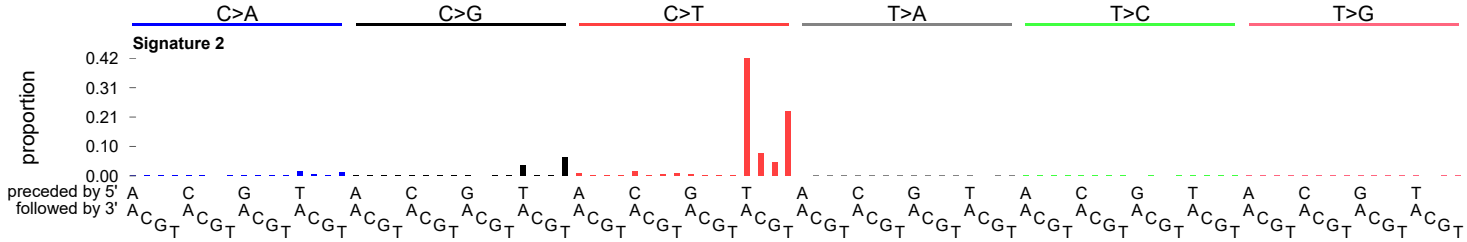
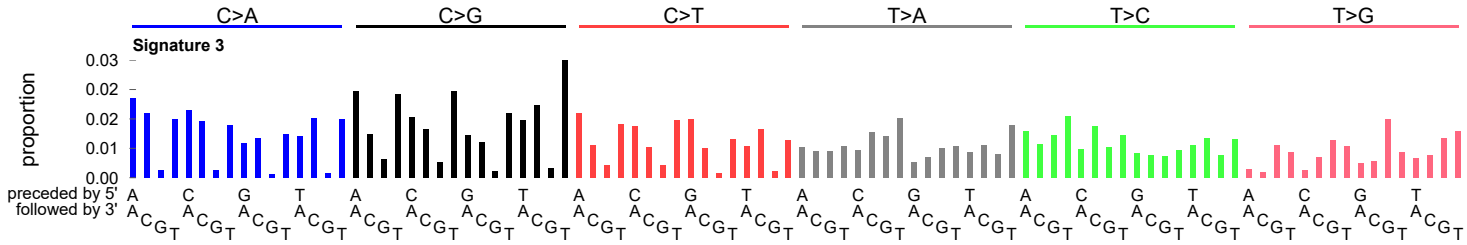
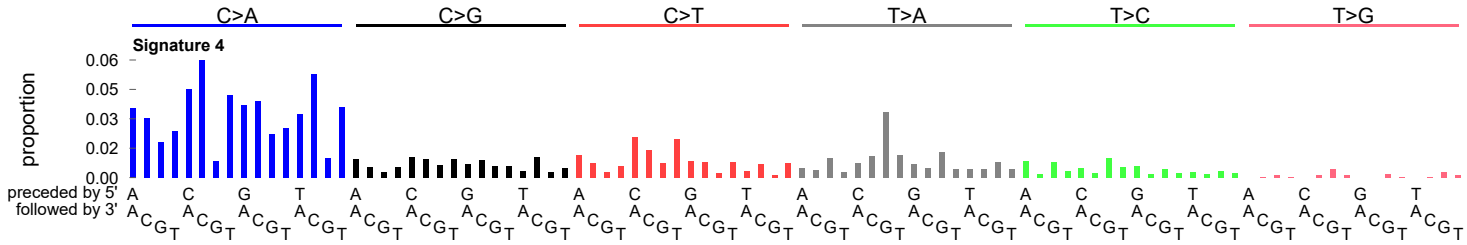
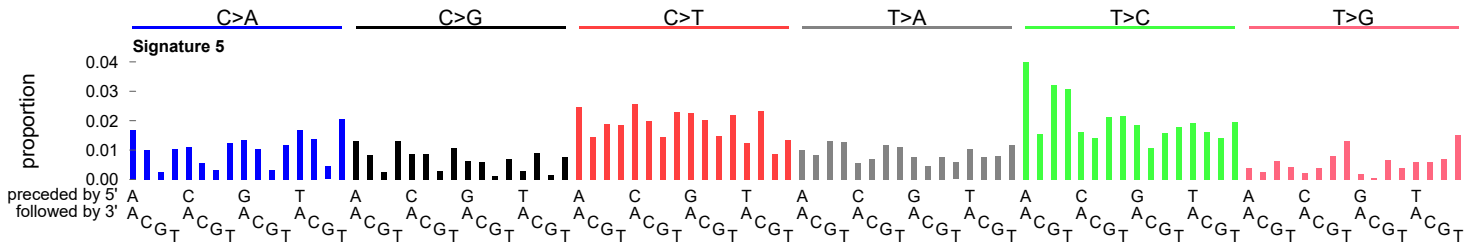
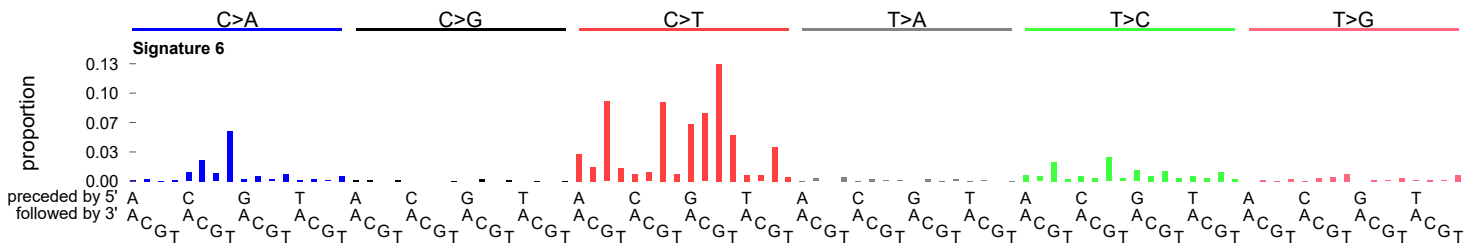

C>A
C>G
C>T
T>A
T>C
T>G
Signature 1
proportion
0.17
0.13
0.09
0.04
0.00
preceded by 5'
followed by 3'

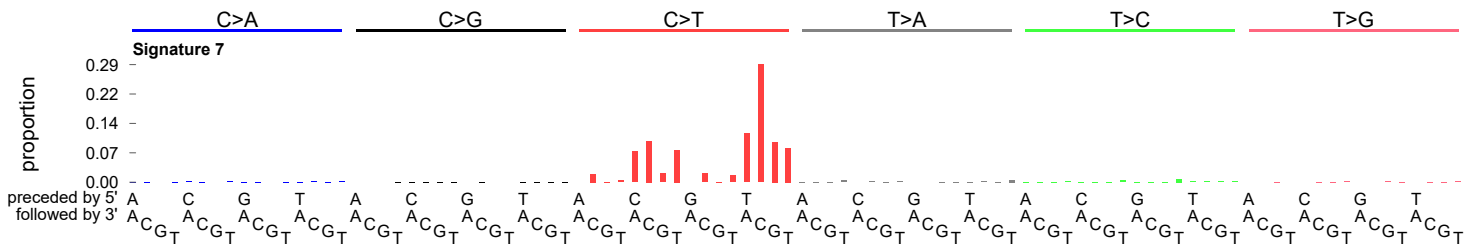

C>A
C>G
C>T
T>A
T>C
T>G
Signature 2
proportion
0.42
0.31
0.21
0.10
0.00
preceded by 5'
followed by 3'

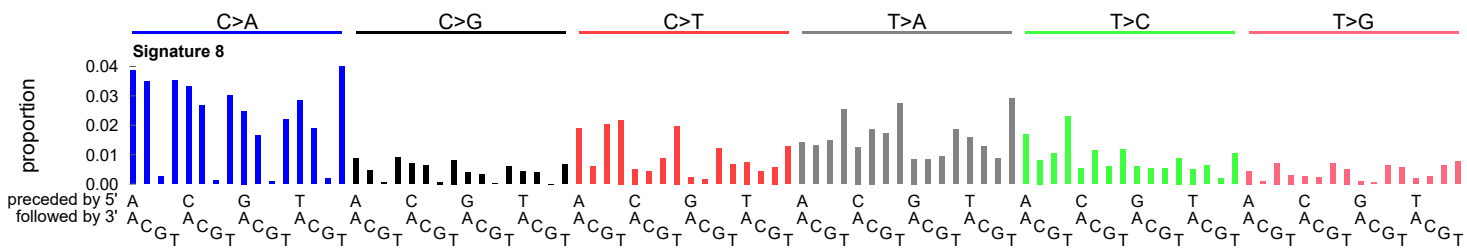

C>A
C>G
C>T
T>A
T>C
T>G
Signature 3
proportion
0.03
0.02
0.02
0.01
0.00
preceded by 5'
followed by 3'

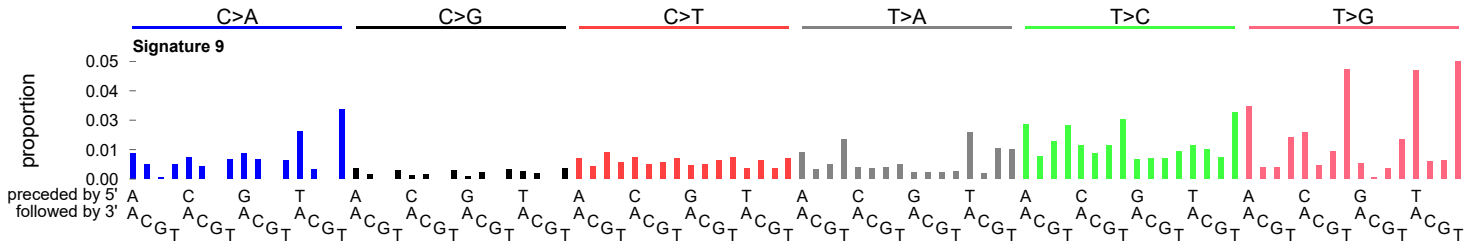

C>A
C>G
C>T
T>A
T>C
T>G
Signature 4
proportion
0.06
0.05
0.03
0.02
0.00
preceded by 5'
followed by 3'

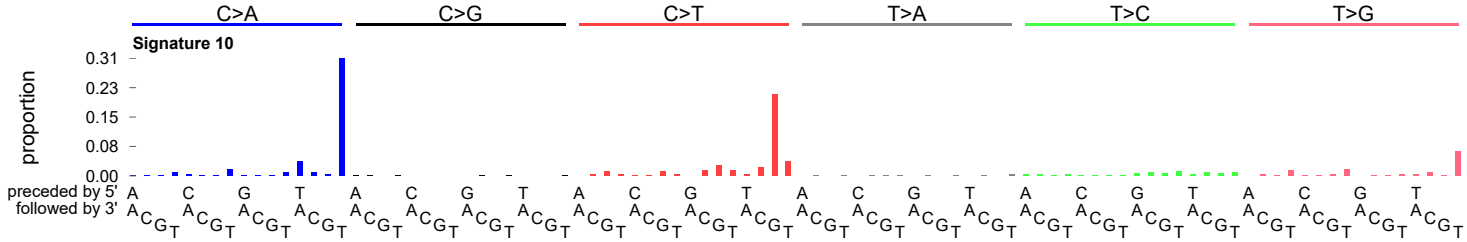

C>A
C>G
C>T
T>A
T>C
T>G
Signature 5
proportion
0.04
0.03
0.02
0.01
0.00
preceded by 5'
followed by 3'

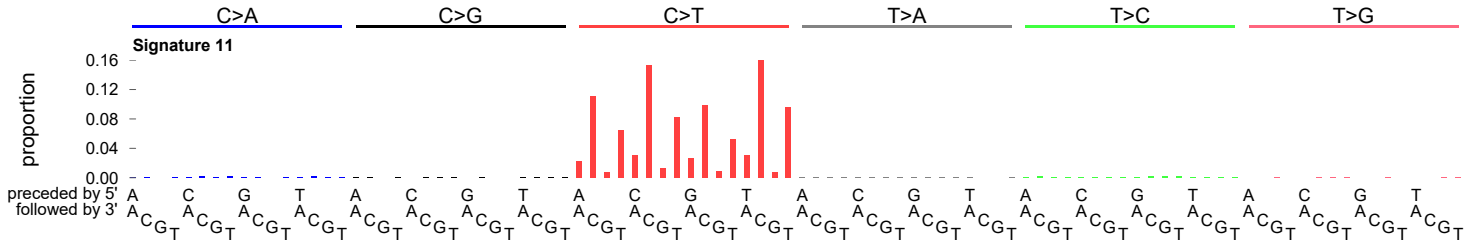

C>A
C>G
C>T
T>A
T>C
T>G
Signature 6
proportion
0.13
0.10
0.07
0.03
0.00
preceded by 5'
followed by 3'

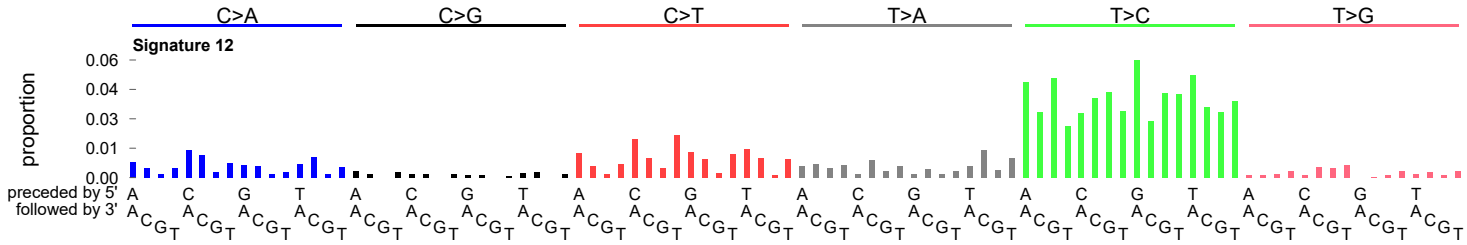

C>A
C>G
C>T
T>A
T>C
T>G
Signature 7
proportion
0.29
0.22
0.14
0.07
0.00
preceded by 5'
followed by 3'

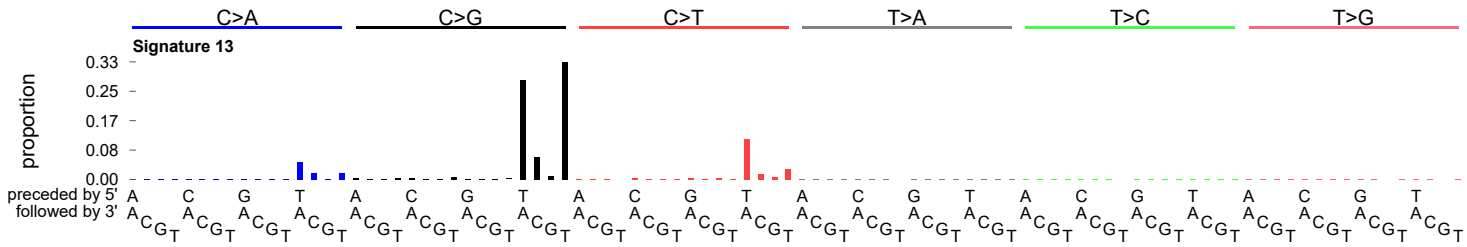

C>A
C>G
C>T
T>A
T>C
T>G
Signature 8
proportion
0.04
0.03
0.02
0.01
0.00
preceded by 5'
followed by 3'

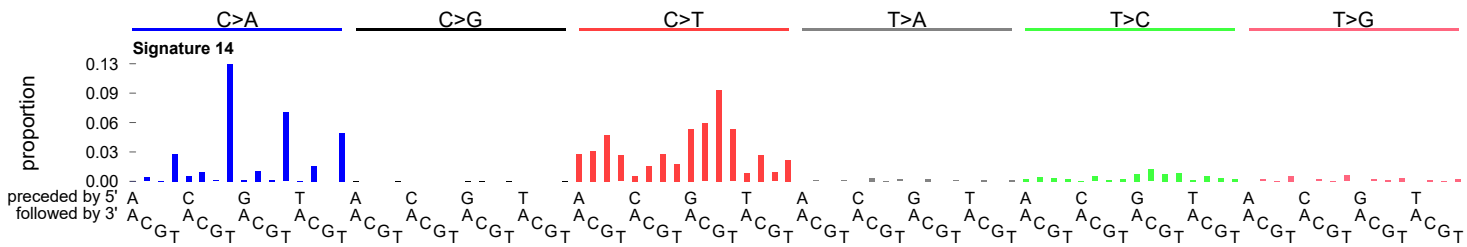

C>A
C>G
C>T
T>A
T>C
T>G
Signature 9
proportion
0.05
0.04
0.03
0.01
0.00
preceded by 5'
followed by 3'

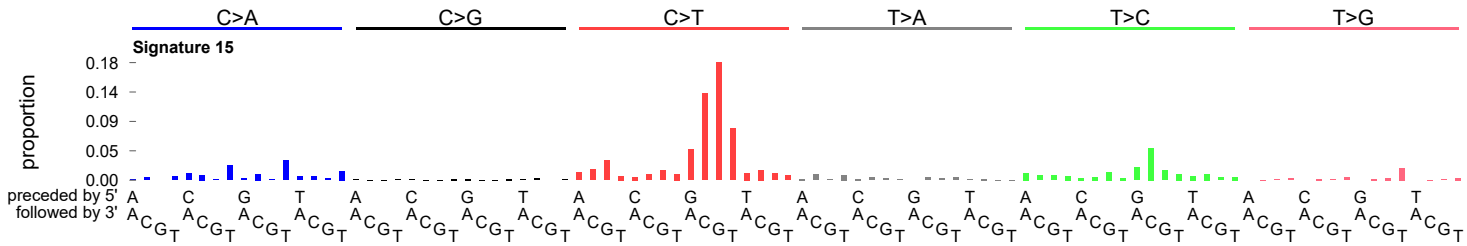

C>A
C>G
C>T
T>A
T>C
T>G
Signature 10
proportion
0.31
0.23
0.15
0.08
0.00
preceded by 5'
followed by 3'

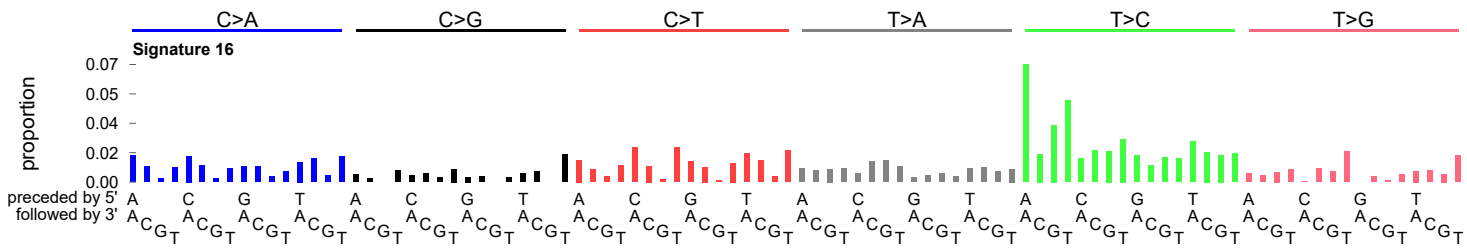

C>A
C>G
C>T
T>A
T>C
T>G
Signature 11
proportion
0.16
0.12
0.08
0.04
0.00
preceded by 5'
followed by 3'

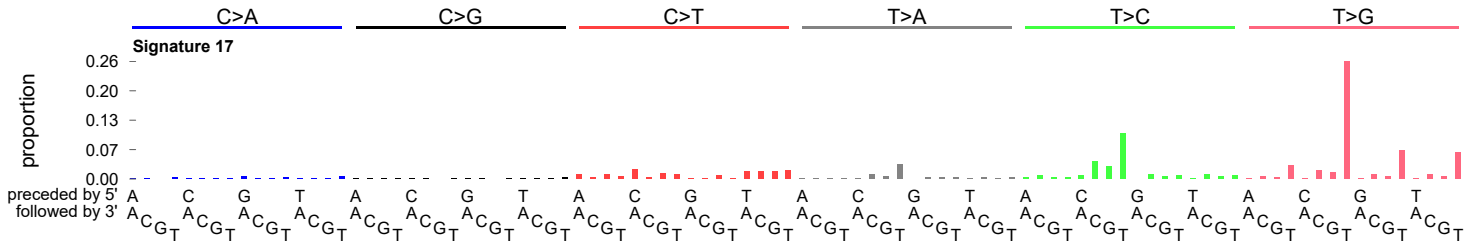

C>A
C>G
C>T
T>A
T>C
T>G
Signature 12
proportion
0.06
0.04
0.03
0.01
0.00
preceded by 5'
followed by 3'

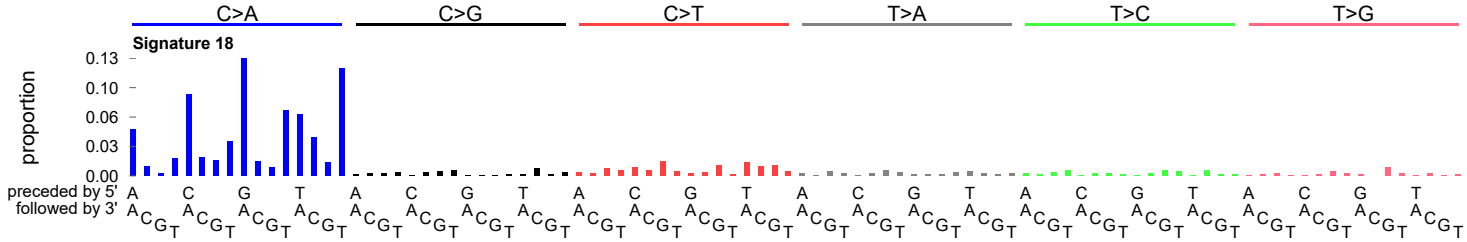

C>A
C>G
C>T
T>A
T>C
T>G
Signature 13
proportion
0.33
0.25
0.17
0.08
0.00
preceded by 5'
followed by 3'

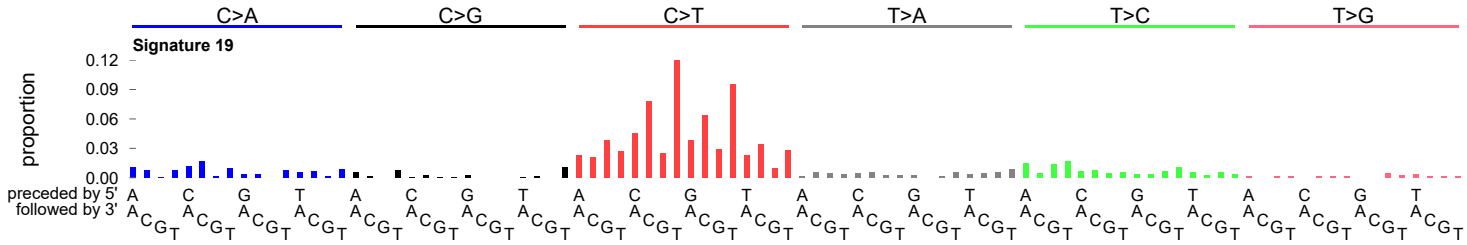

C>A
C>G
C>T
T>A
T>C
T>G
Signature 14
proportion
0.13
0.09
0.06
0.03
0.00
preceded by 5'
followed by 3'

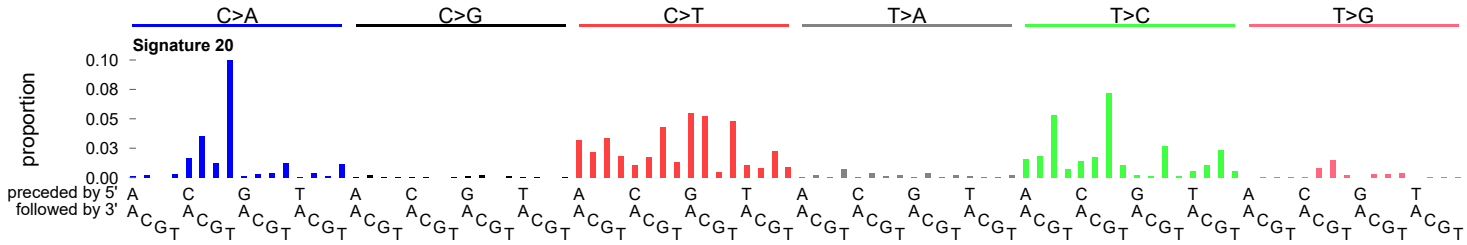

C>A
C>G
C>T
T>A
T>C
T>G
Signature 15
proportion
0.18
0.14
0.09
0.05
0.00
preceded by 5'
followed by 3'

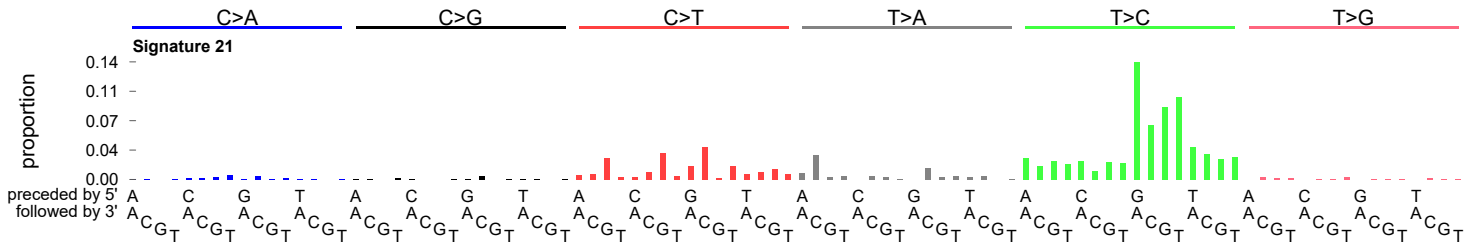

C>A
C>G
C>T
T>A
T>C
T>G
Signature 16
proportion
0.07
0.05
0.04
0.02
0.00
preceded by 5'
followed by 3'

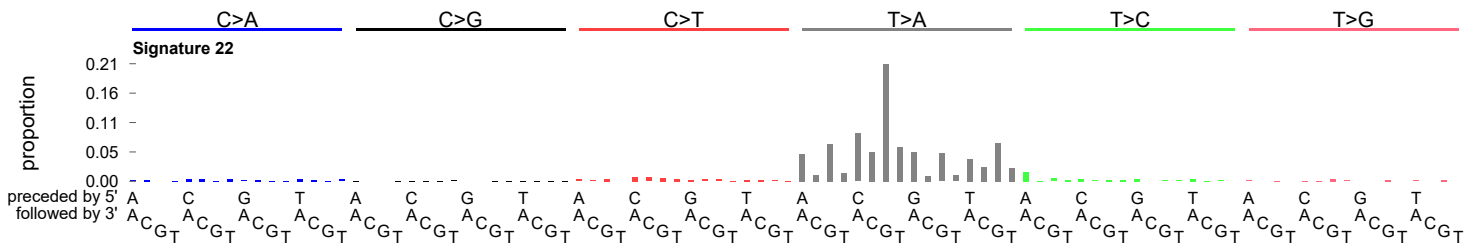

C>A
C>G
C>T
T>A
T>C
T>G
Signature 17
proportion
0.26
0.20
0.13
0.07
0.00
preceded by 5'
followed by 3'

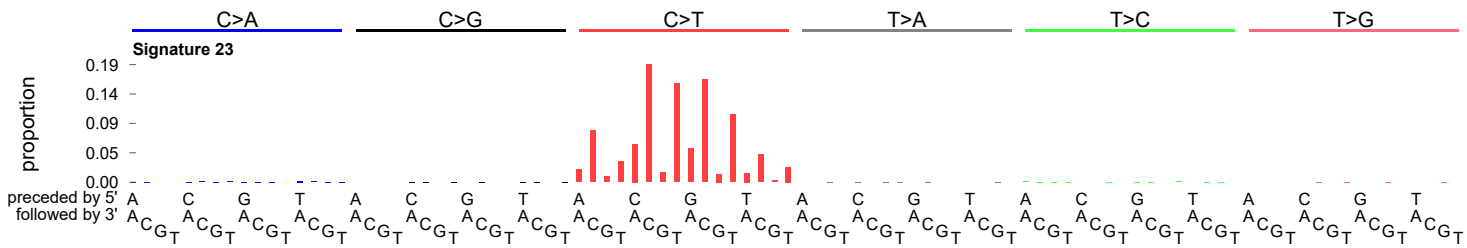

C>A
C>G
C>T
T>A
T>C
T>G
Signature 18
proportion
0.13
0.10
0.06
0.03
0.00
preceded by 5'
followed by 3'

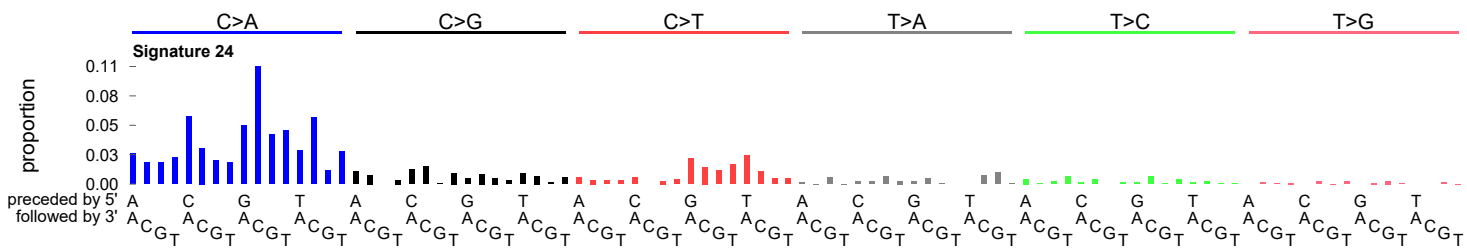

C>A
C>G
C>T
T>A
T>C
T>G
Signature 19
proportion
0.12
0.09
0.06
0.03
0.00
preceded by 5'
followed by 3'

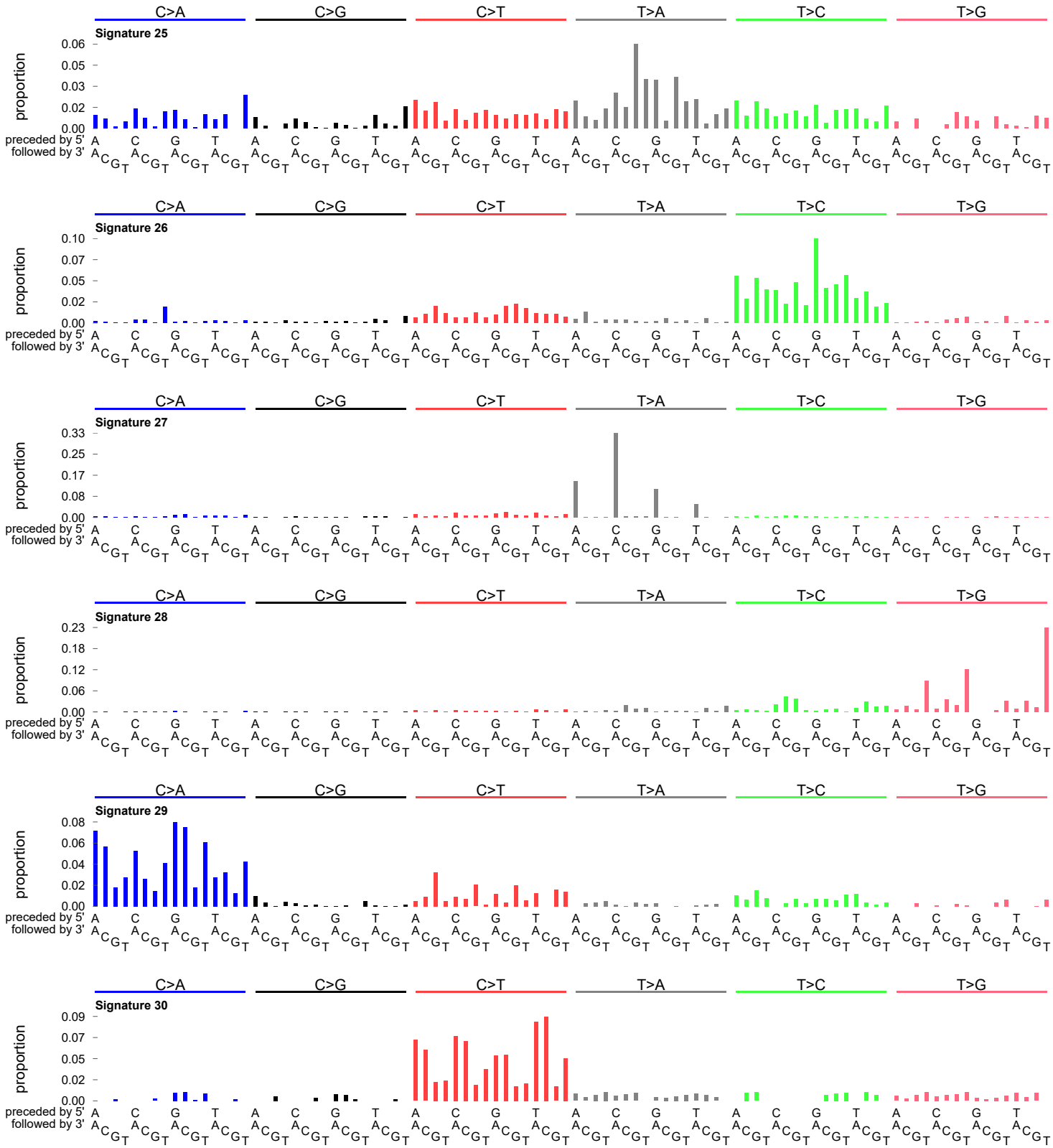

C>A
C>G
C>T
T>A
T>C
T>G
Signature 20
proportion
0.10
0.08
0.05
0.03
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
Signature 21
proportion
0.14
0.11
0.07
0.04
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
Signature 22
proportion
0.21
0.16
0.11
0.05
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
Signature 23
proportion
0.19
0.14
0.09
0.05
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
Signature 24
proportion
0.11
0.08
0.05
0.03
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
Signature 25
Signature 26
Signature 27
Signature 28
Signature 29
Signature 30
proportion
preceded by 5'
followed by 3'