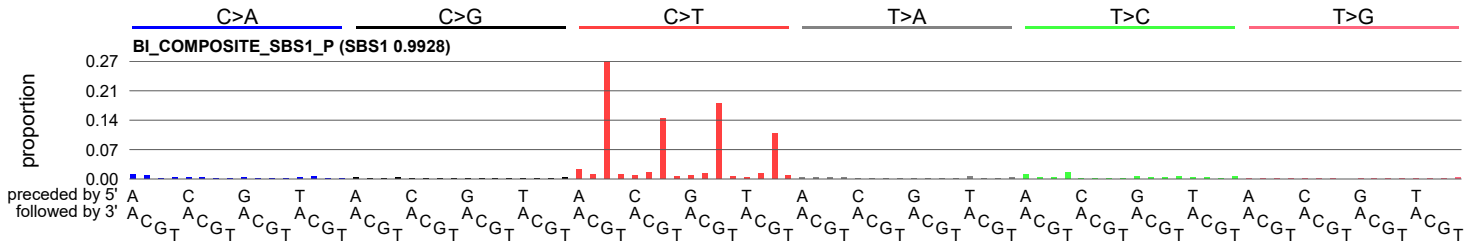
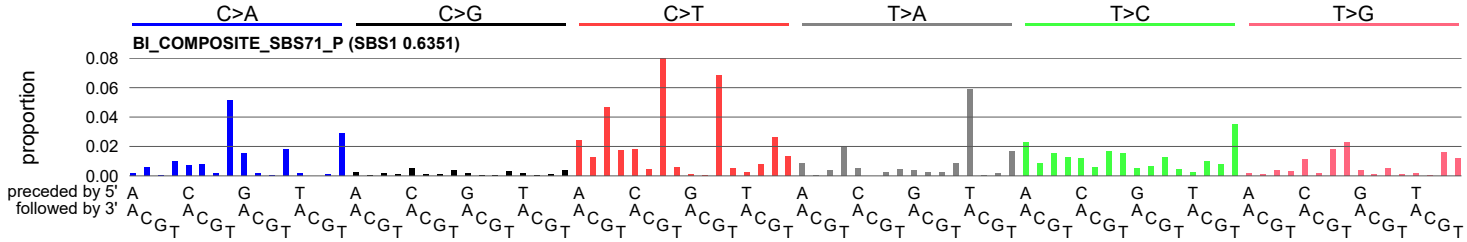

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS1_P (SBS1 0.9928)
proportion
0.27
0.21
0.14
0.07
0.00
preceded by 5'
followed by 3'


C>A
C>G
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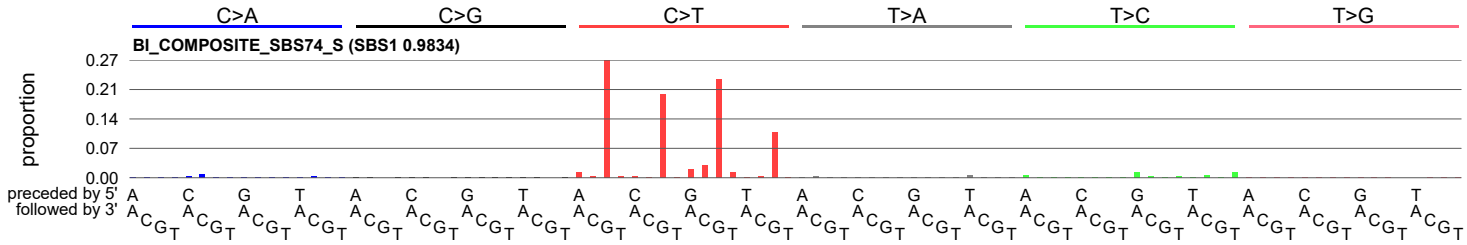
T>C
T>G
BI_COMPOSITE_SBS71_P (SBS1 0.6351)
proportion
0.08
0.06
0.04
0.02
0.00
preceded by 5'
followed by 3'


C>A
C>G
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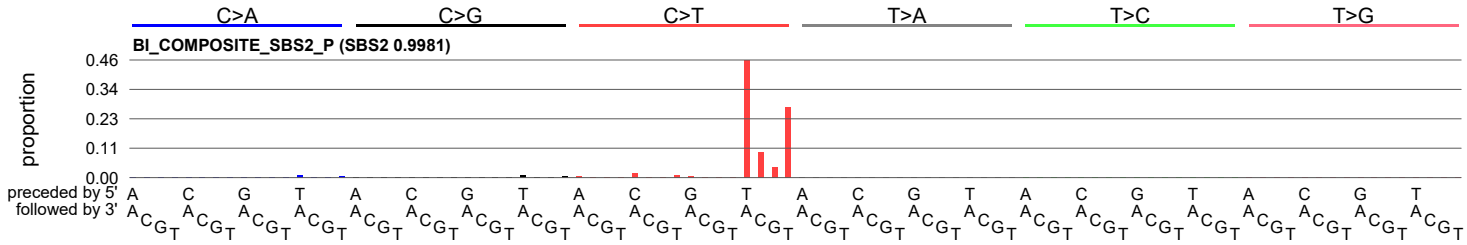
T>C
T>G
BI_COMPOSITE_SBS74_S (SBS1 0.9834)
proportion
0.27
0.21
0.14
0.07
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
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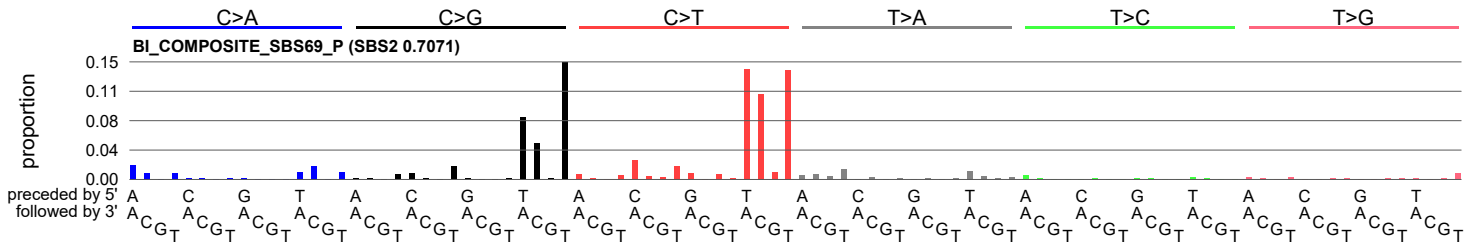
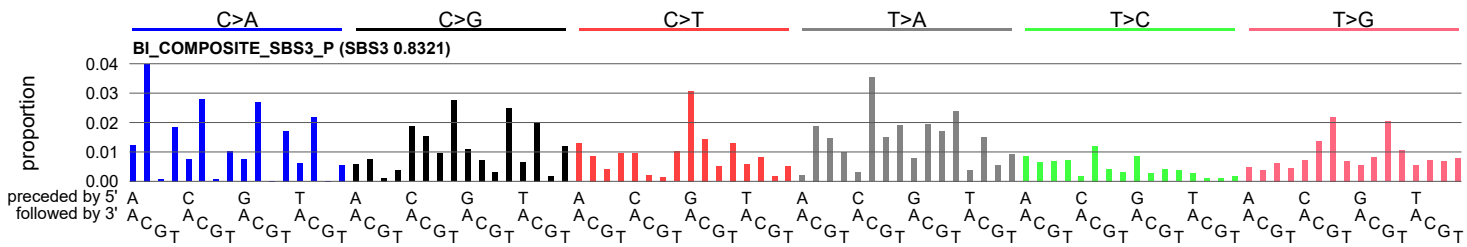
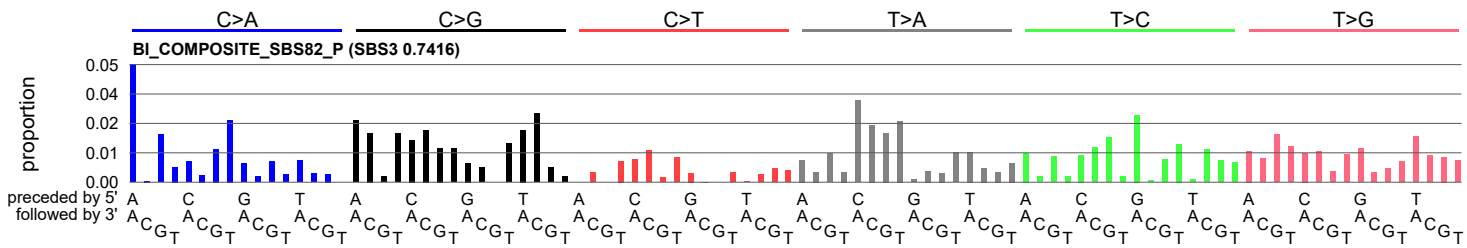
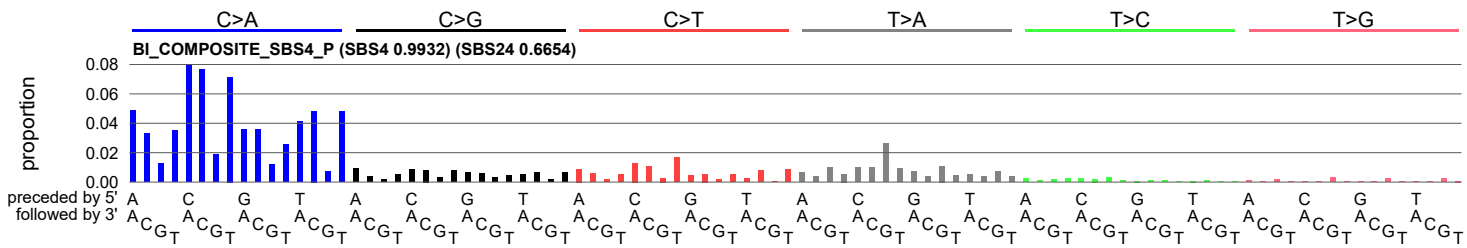
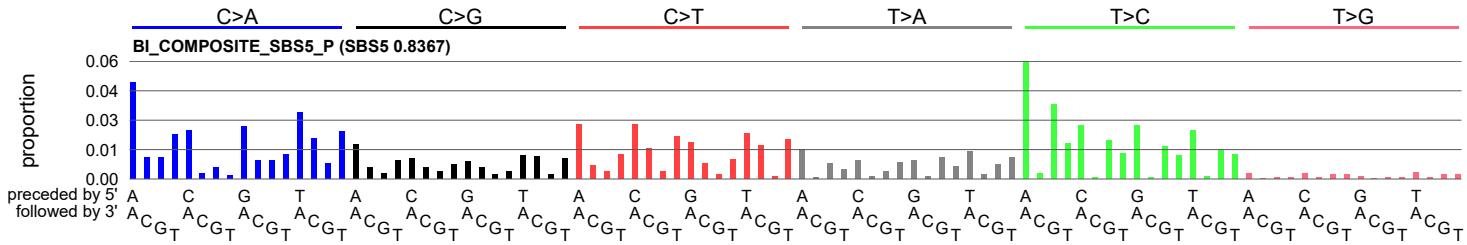
T>C
T>G
BI_COMPOSITE_SBS2_P (SBS2 0.9981)
proportion
0.46
0.34
0.23
0.11
0.00
preceded by 5'
followed by 3'

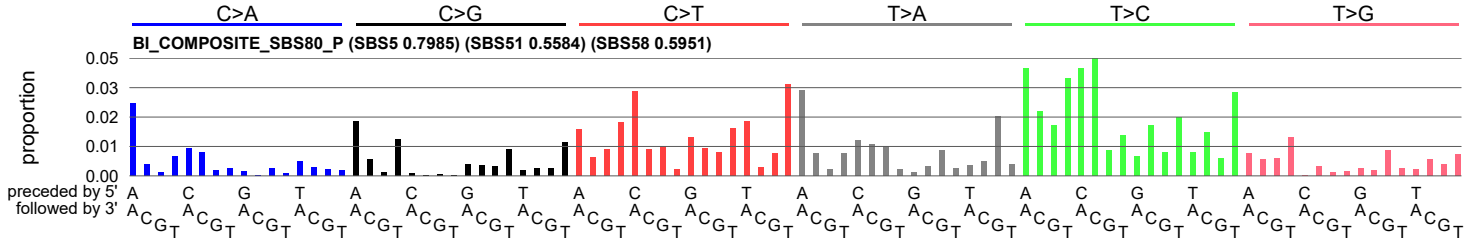

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS69_P (SBS2 0.7071)
proportion
0.15
0.11
0.08
0.04
0.00
preceded by 5'
followed by 3'

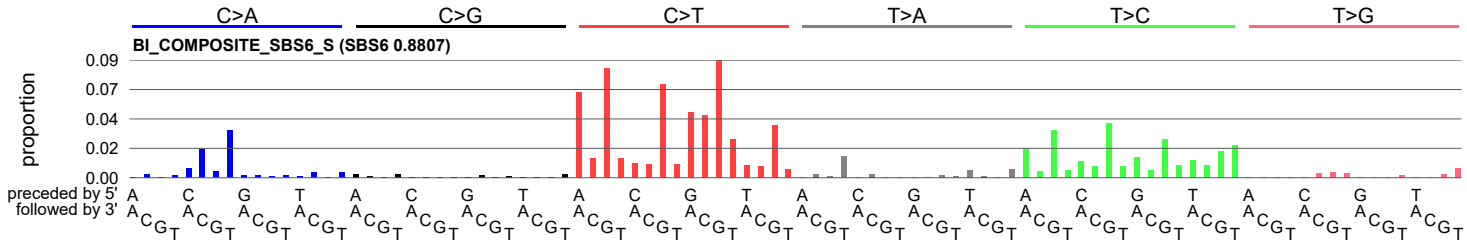

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS3_P (SBS3 0.8321)
proportion
0.04
0.03
0.02
0.01
0.00
preceded by 5'
followed by 3'

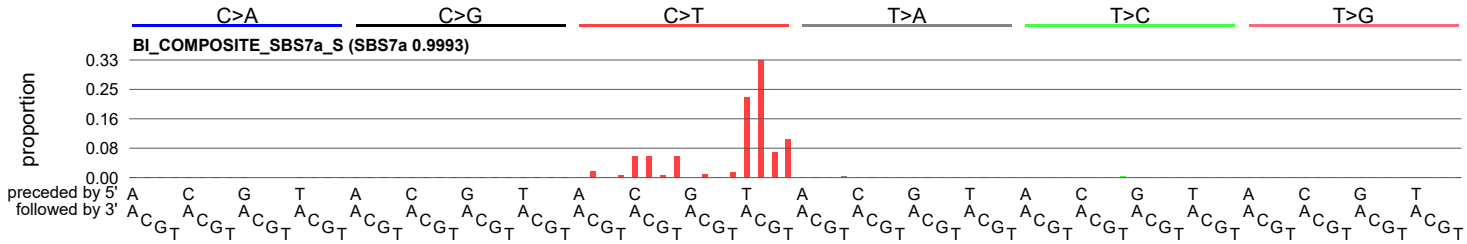

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS82_P (SBS3 0.7416)
proportion
0.05
0.04
0.02
0.01
0.00
preceded by 5'
followed by 3'

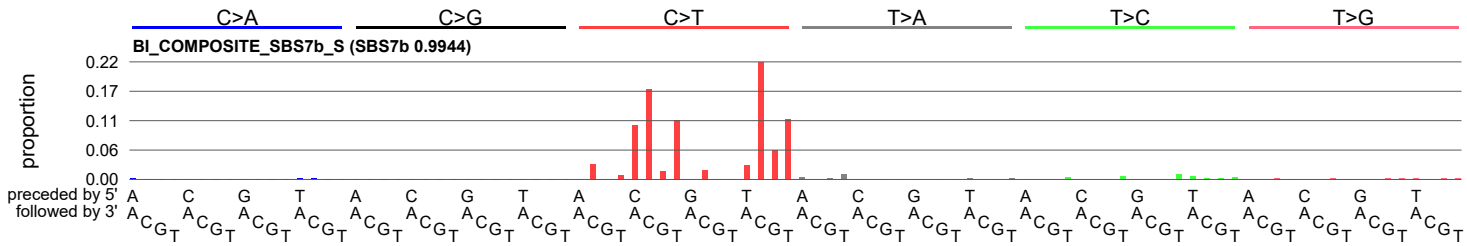

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS4_P (SBS4 0.9932) (SBS24 0.6654)
proportion
0.08
0.06
0.04
0.02
0.00
preceded by 5'
followed by 3'

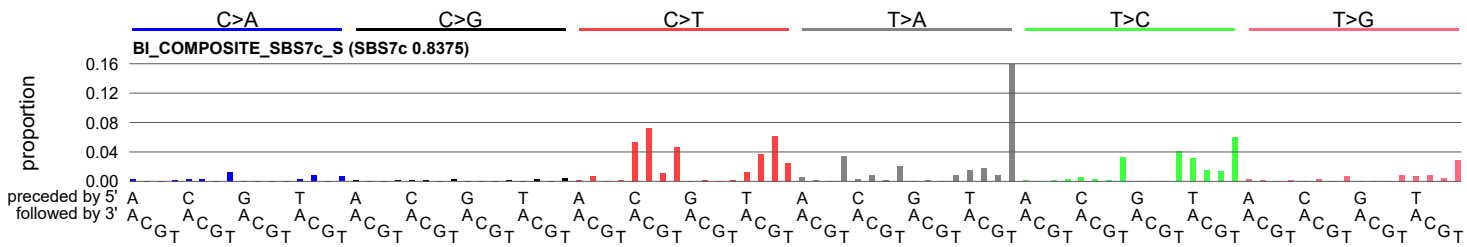

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS5_P (SBS5 0.8367)
proportion
0.06
0.04
0.03
0.01
0.00
preceded by 5'
followed by 3'

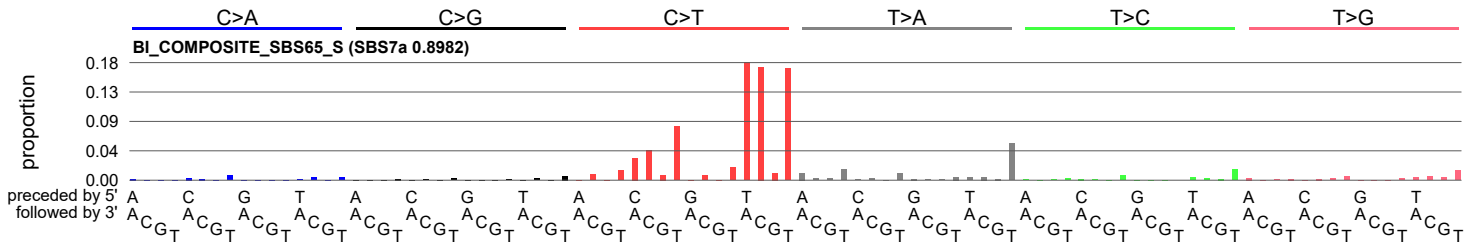

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS80_P (SBS5 0.7985) (SBS51 0.5584) (SBS58 0.5951)
proportion
0.05
0.03
0.02
0.01
0.00
preceded by 5'
followed by 3'

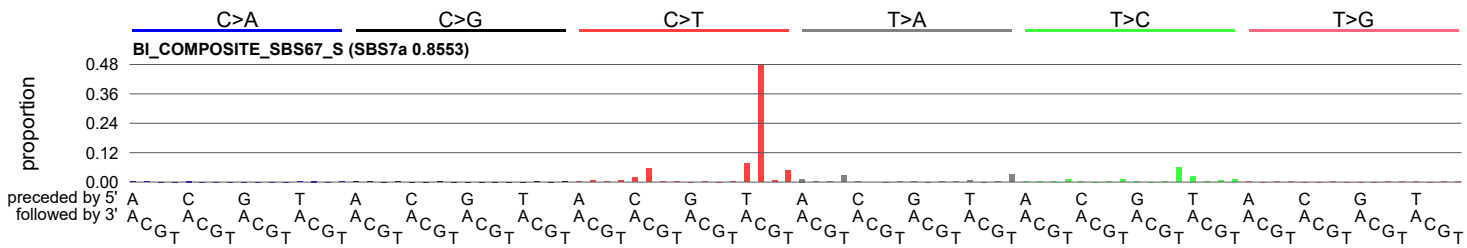

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS6_S (SBS6 0.8807)
proportion
0.09
0.07
0.04
0.02
0.00
preceded by 5'
followed by 3'

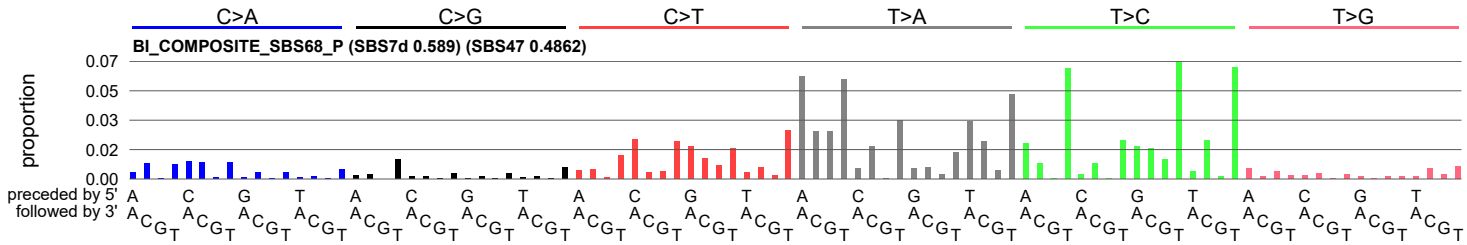

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS7a_S (SBS7a 0.9993)
proportion
0.33
0.25
0.16
0.08
0.00
preceded by 5'
followed by 3'

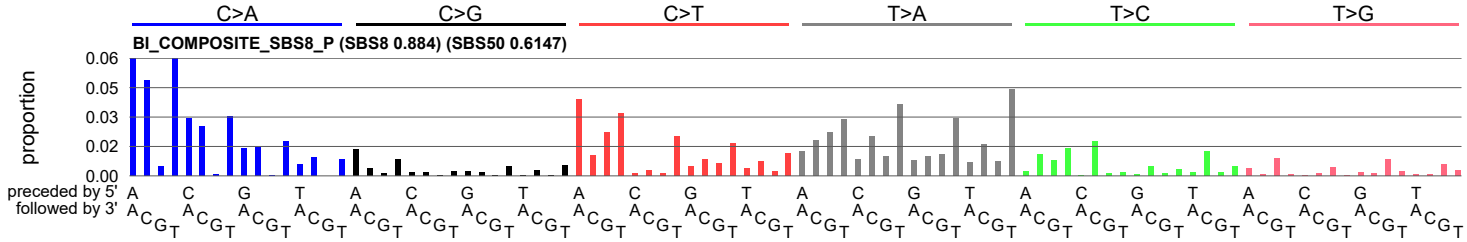

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS7b_S (SBS7b 0.9944)
proportion
0.22
0.17
0.11
0.06
0.00
preceded by 5'
followed by 3'

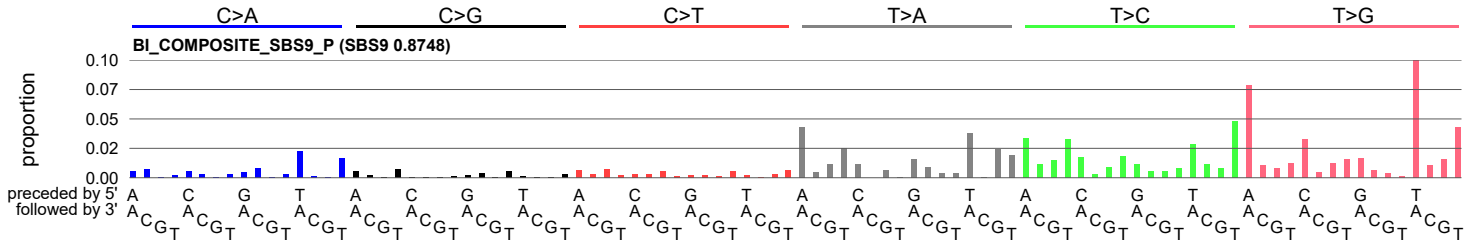

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS7c_S (SBS7c 0.8375)
proportion
0.16
0.12
0.08
0.04
0.00
preceded by 5'
followed by 3'

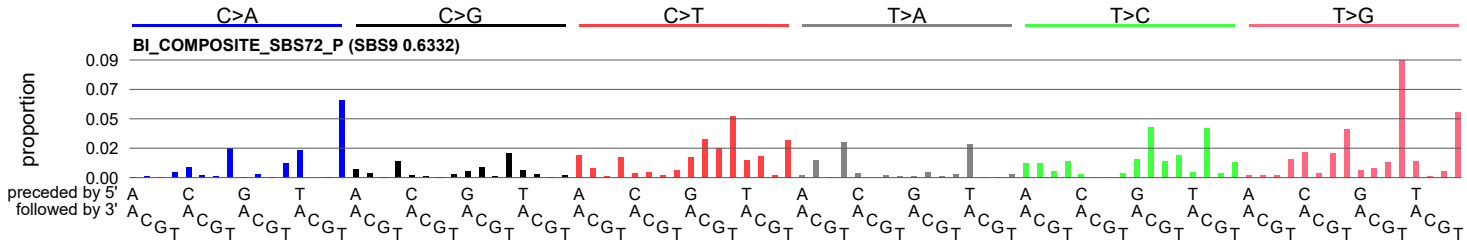

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS65_S (SBS7a 0.8982)
proportion
0.18
0.13
0.09
0.04
0.00
preceded by 5'
followed by 3'

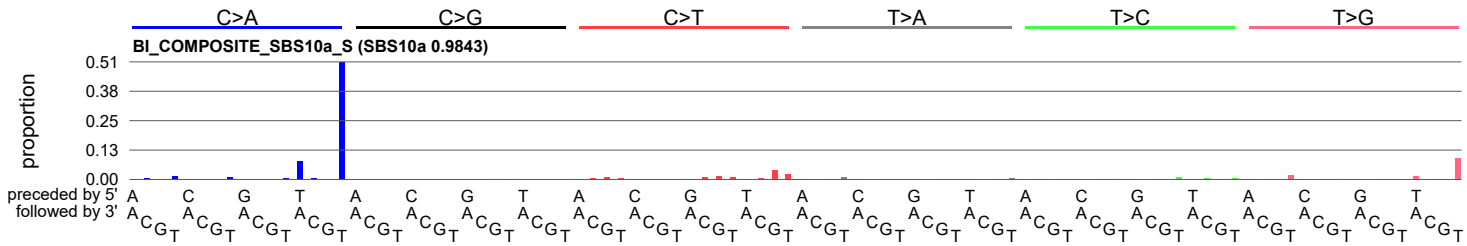

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS67_S (SBS7a 0.8553)
proportion
0.48
0.36
0.24
0.12
0.00
preceded by 5'
followed by 3'

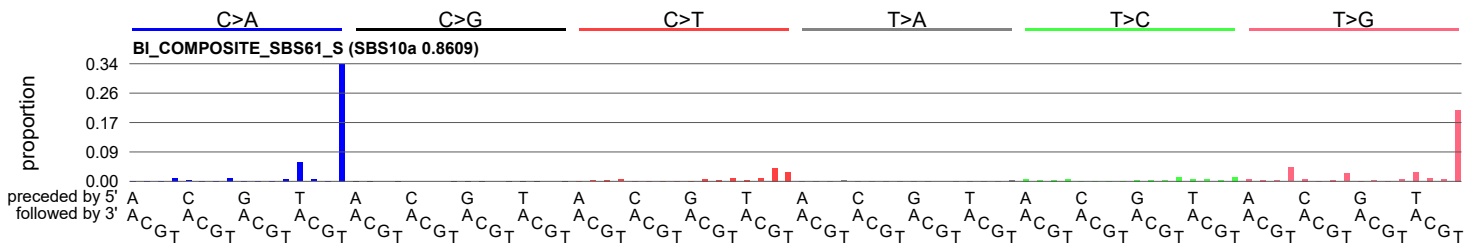

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS68_P (SBS7d 0.589) (SBS47 0.4862)
proportion
0.07
0.05
0.03
0.02
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS8_P (SBS8 0.884) (SBS50 0.6147)
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
BI_COMPOSITE_SBS9_P (SBS9 0.8748)
proportion
0.10
0.07
0.05
0.02
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS72_P (SBS9 0.6332)
proportion
0.09
0.07
0.05
0.02
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS10a_S (SBS10a 0.9843)
proportion
0.51
0.38
0.25
0.13
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
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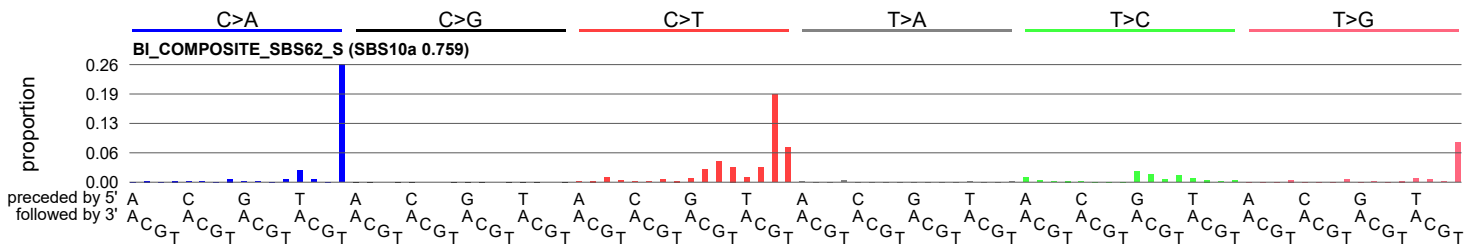
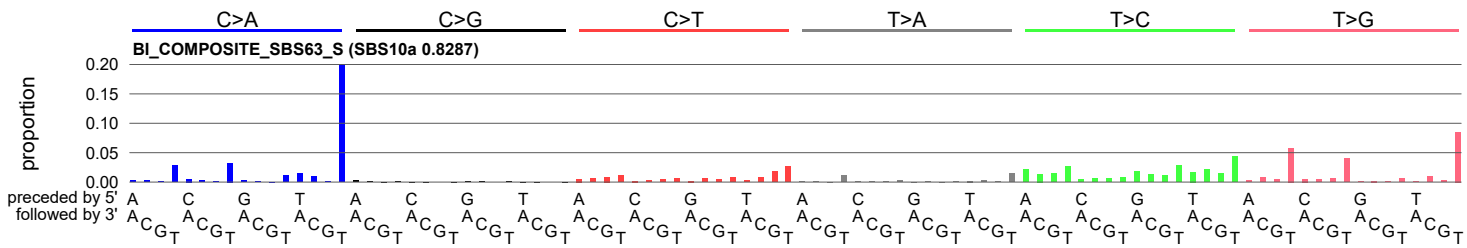
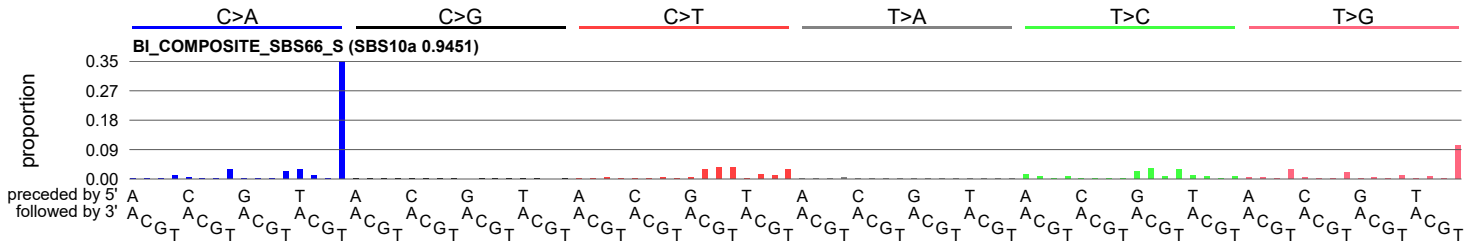
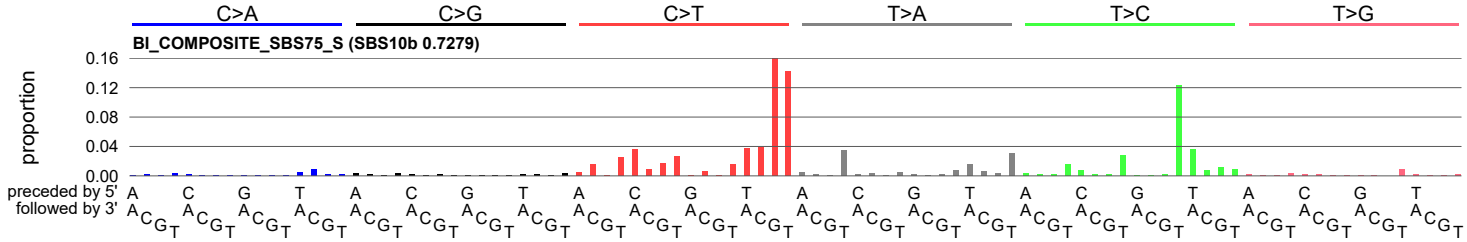
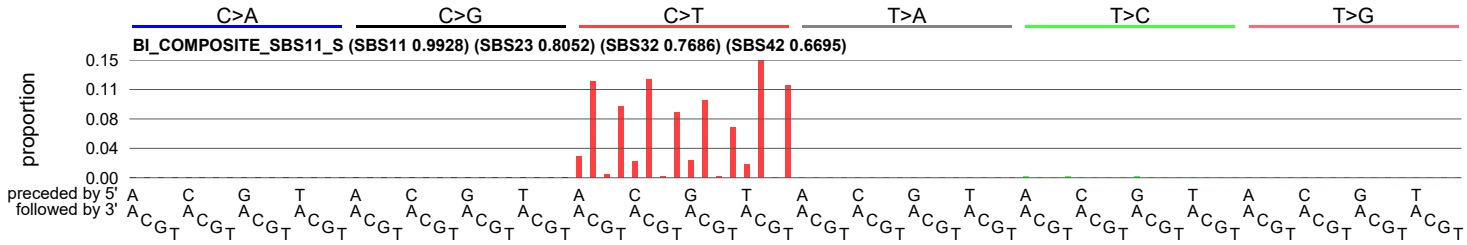
T>C
T>G
BI_COMPOSITE_SBS61_S (SBS10a 0.8609)
proportion
0.34
0.26
0.17
0.09
0.00
preceded by 5'
followed by 3'

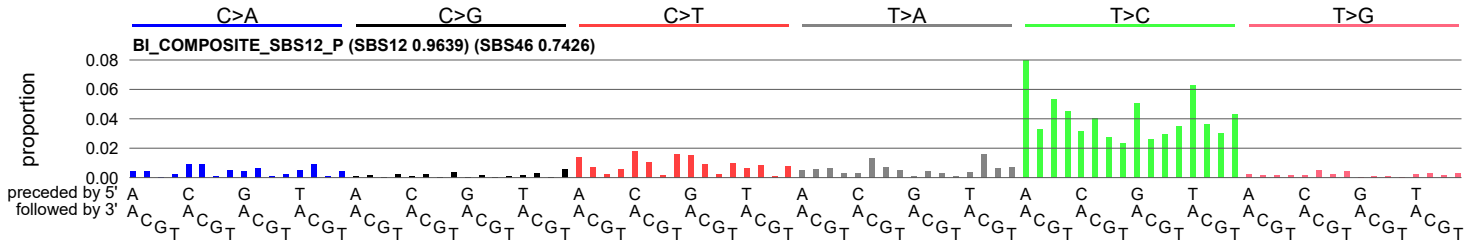

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS62_S (SBS10a 0.759)
proportion
0.26
0.19
0.13
0.06
0.00
preceded by 5'
followed by 3'

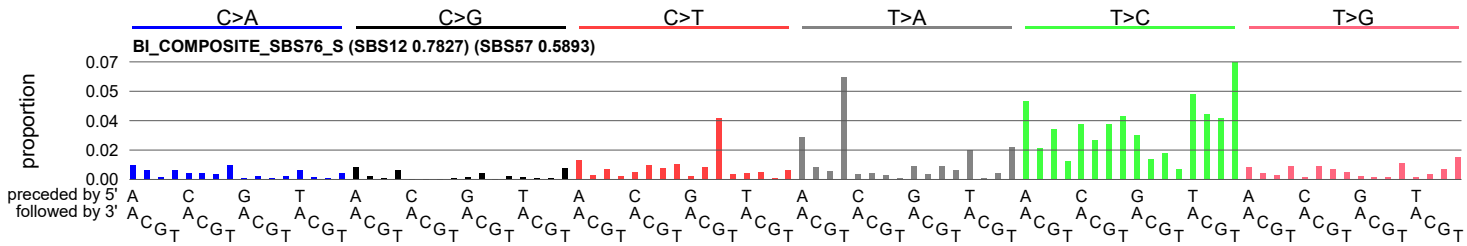

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS63_S (SBS10a 0.8287)
proportion
0.20
0.15
0.10
0.05
0.00
preceded by 5'
followed by 3'

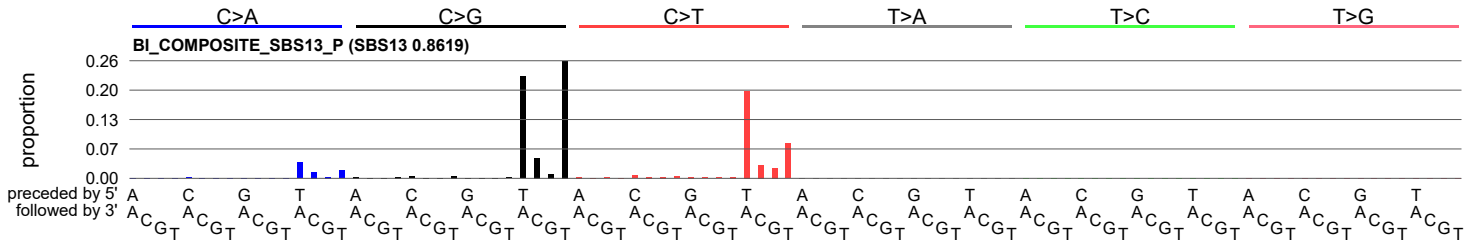

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS66_S (SBS10a 0.9451)
proportion
0.35
0.27
0.18
0.09
0.00
preceded by 5'
followed by 3'

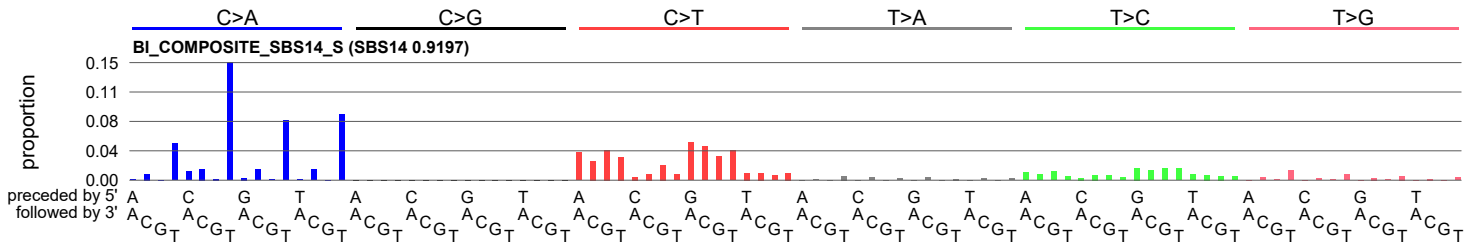

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS75_S (SBS10b 0.7279)
proportion
0.16
0.12
0.08
0.04
0.00
preceded by 5'
followed by 3'

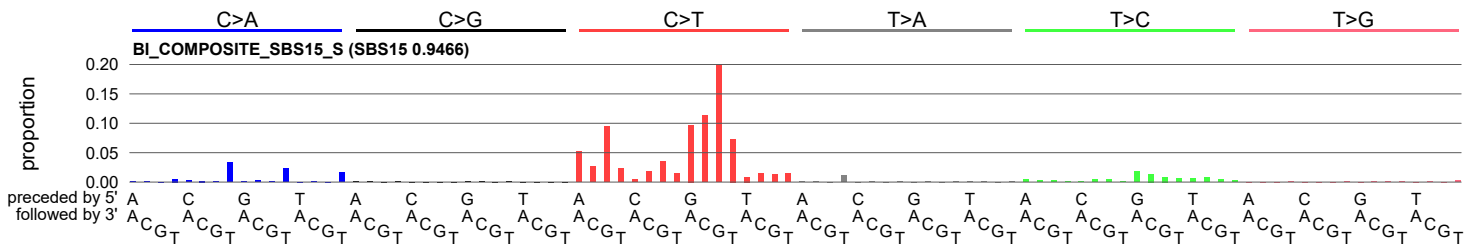

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS11_S (SBS11 0.9928) (SBS23 0.8052) (SBS32 0.7686) (SBS42 0.6695)
proportion
0.15
0.11
0.08
0.04
0.00
preceded by 5'
followed by 3'

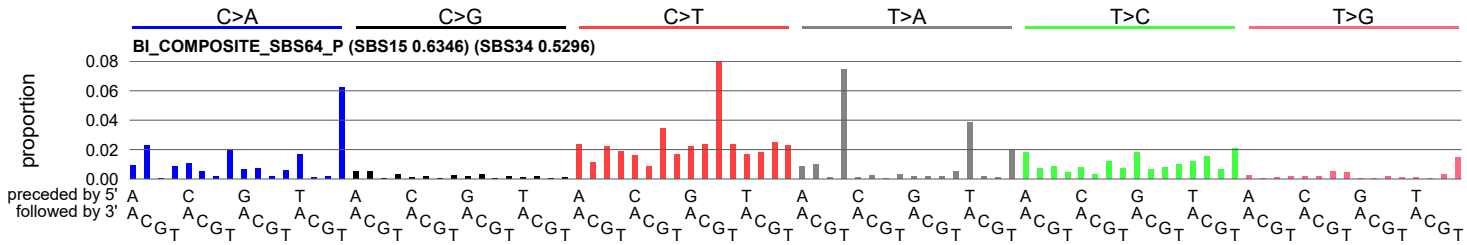

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS12_P (SBS12 0.9639) (SBS46 0.7426)
proportion
0.08
0.06
0.04
0.02
0.00
preceded by 5'
followed by 3'

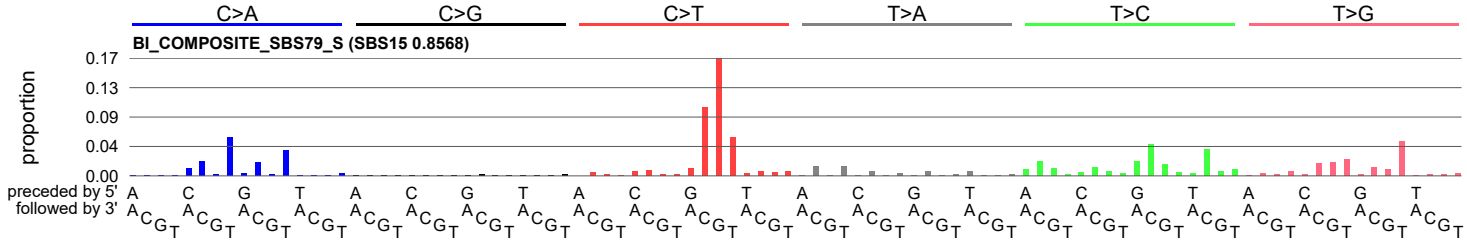

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS76_S (SBS12 0.7827) (SBS57 0.5893)
proportion
0.07
0.05
0.04
0.02
0.00
preceded by 5'
followed by 3'

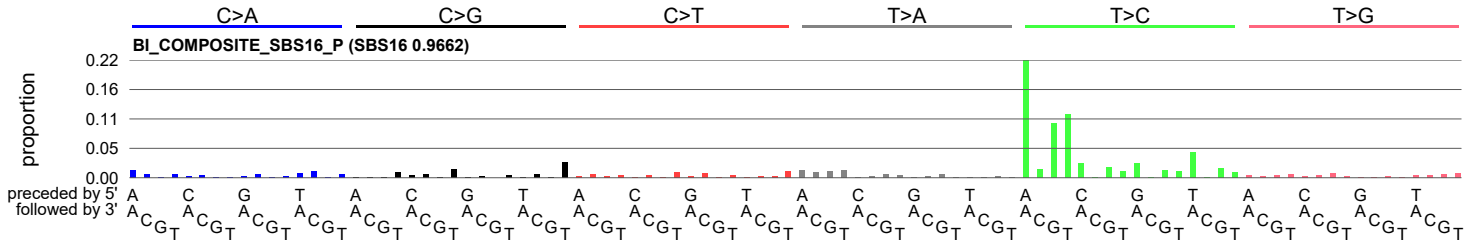

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS13_P (SBS13 0.8619)
proportion
0.26
0.20
0.13
0.07
0.00
preceded by 5'
followed by 3'

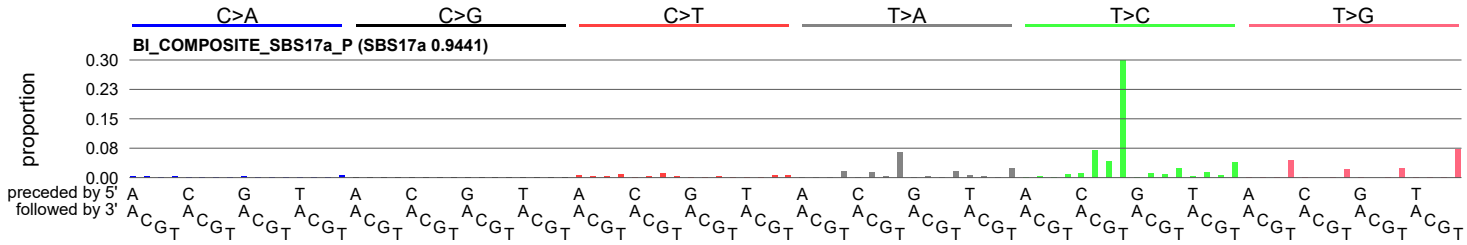

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS14_S (SBS14 0.9197)
proportion
0.15
0.11
0.08
0.04
0.00
preceded by 5'
followed by 3'

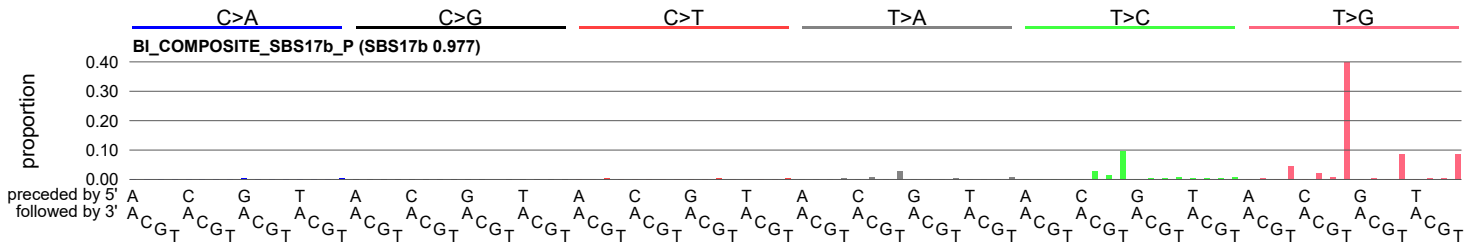

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS15_S (SBS15 0.9466)
proportion
0.20
0.15
0.10
0.05
0.00
preceded by 5'
followed by 3'

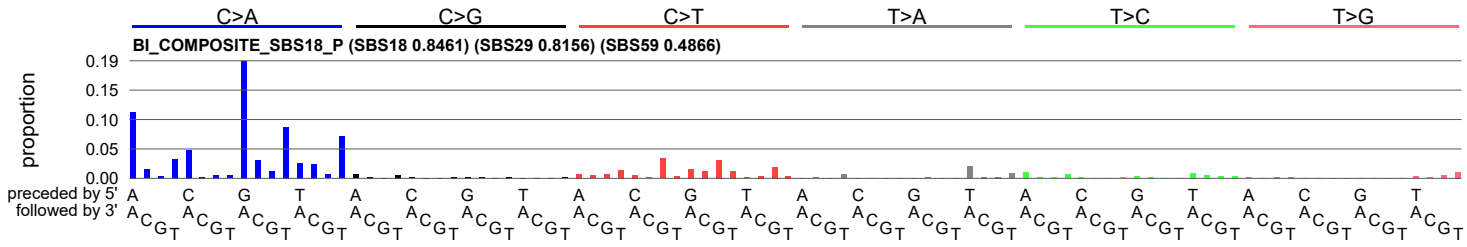

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS64_P (SBS15 0.6346) (SBS34 0.5296)
proportion
0.08
0.06
0.04
0.02
0.00
preceded by 5'
followed by 3'

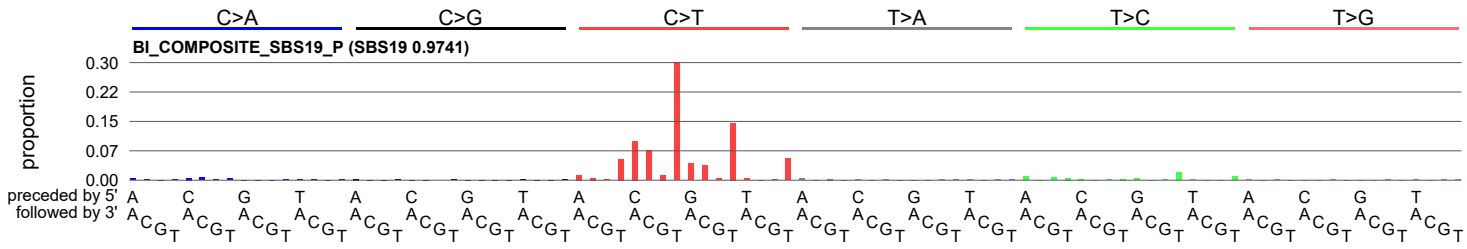

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS79_S (SBS15 0.8568)
proportion
0.17
0.13
0.09
0.04
0.00
preceded by 5'
followed by 3'

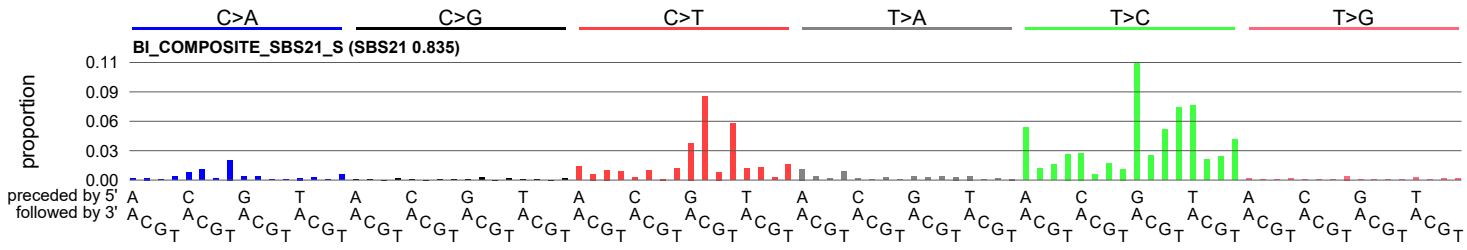

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS16_P (SBS16 0.9662)
proportion
0.22
0.16
0.11
0.05
0.00
preceded by 5'
followed by 3'

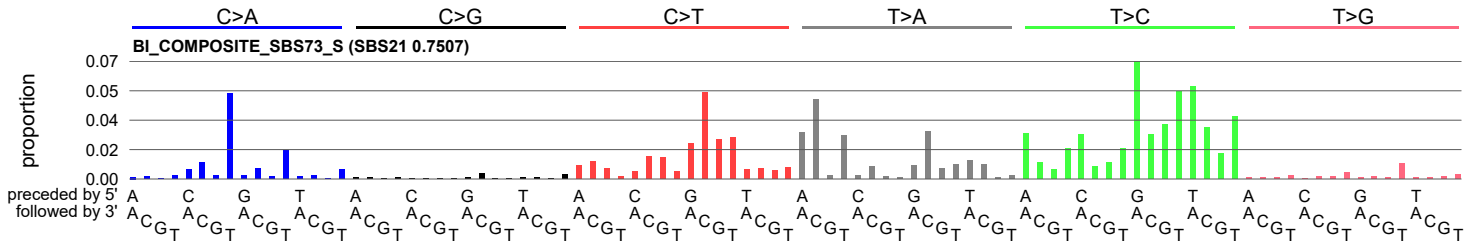

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS17a_P (SBS17a 0.9441)
proportion
0.30
0.23
0.15
0.08
0.00
preceded by 5'
followed by 3'

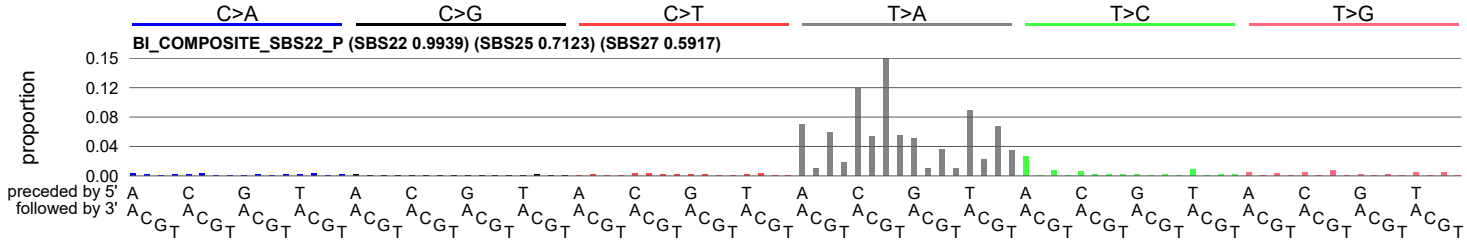

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS17b_P (SBS17b 0.977)
proportion
0.40
0.30
0.20
0.10
0.00
preceded by 5'
followed by 3'

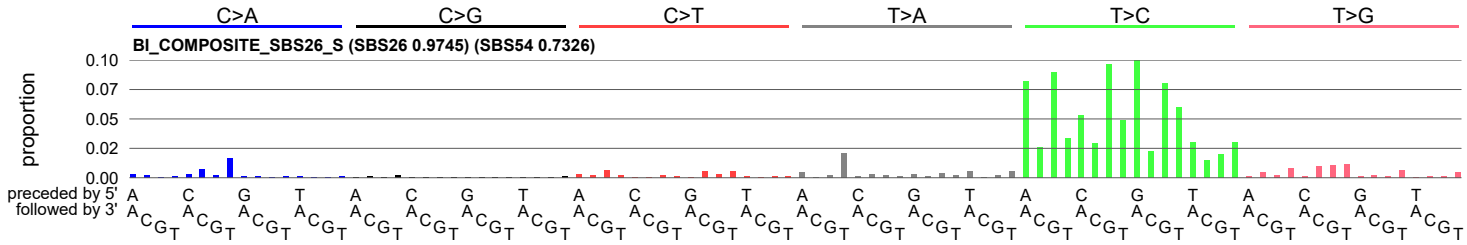

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS18_P (SBS18 0.8461) (SBS29 0.8156) (SBS59 0.4866)
proportion
0.19
0.15
0.10
0.05
0.00
preceded by 5'
followed by 3'

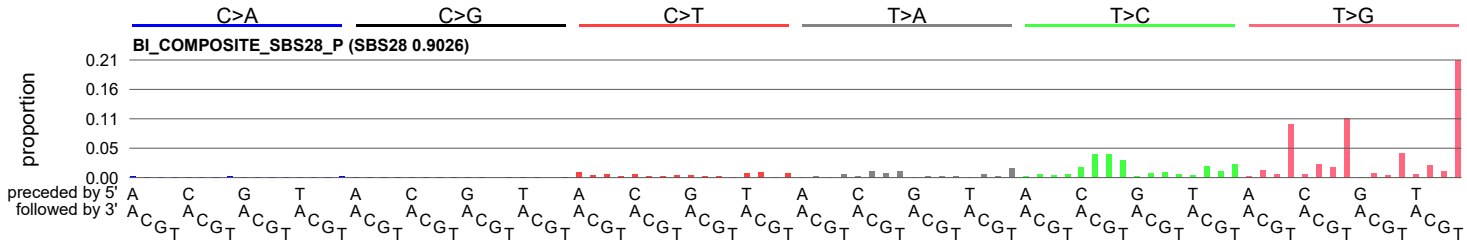

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS19_P (SBS19 0.9741)
proportion
0.30
0.22
0.15
0.07
0.00
preceded by 5'
followed by 3'

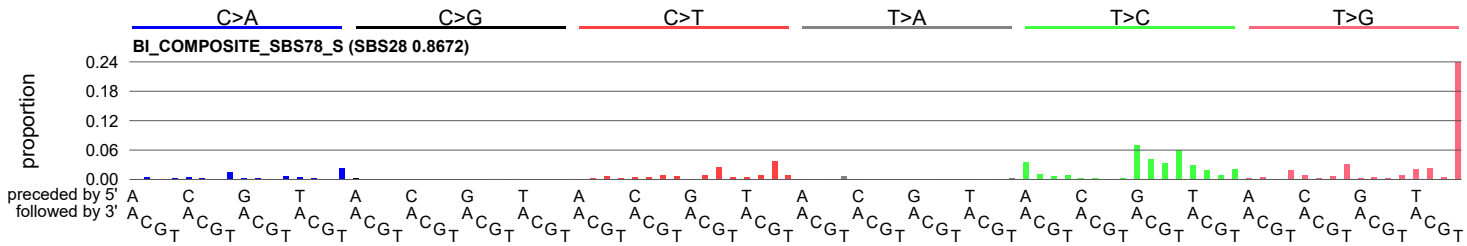

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS21_S (SBS21 0.835)
proportion
0.11
0.09
0.06
0.03
0.00
preceded by 5'
followed by 3'

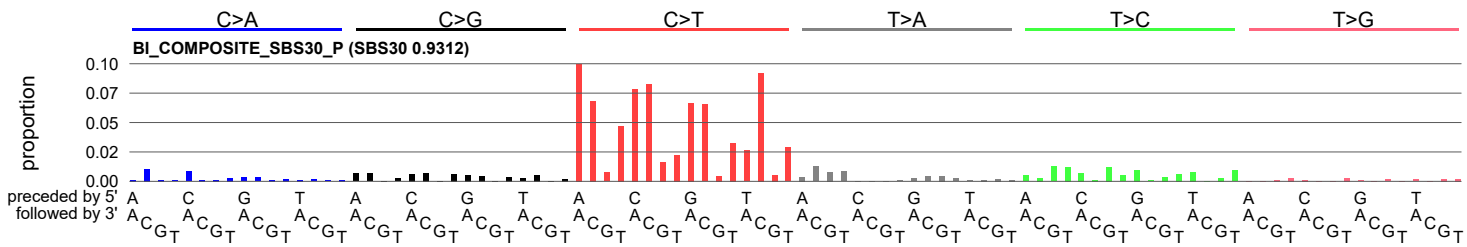

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS73_S (SBS21 0.7507)
proportion
0.07
0.05
0.04
0.02
0.00
preceded by 5'
followed by 3'

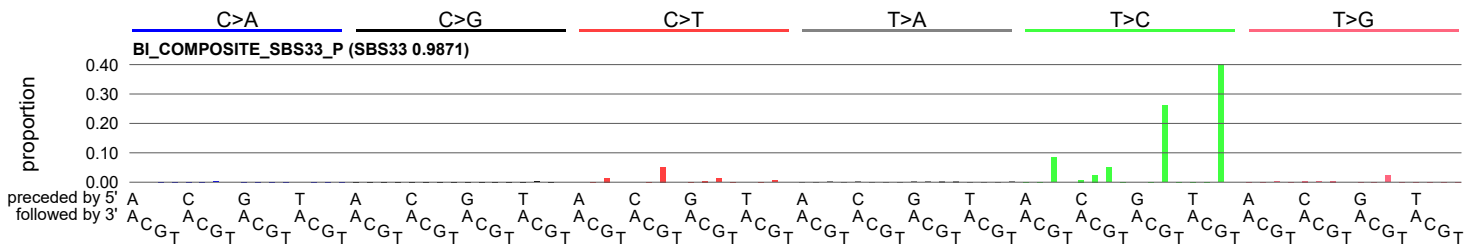

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS22_P (SBS22 0.9939) (SBS25 0.7123) (SBS27 0.5917)
proportion
0.15
0.12
0.08
0.04
0.00
preceded by 5'
followed by 3'

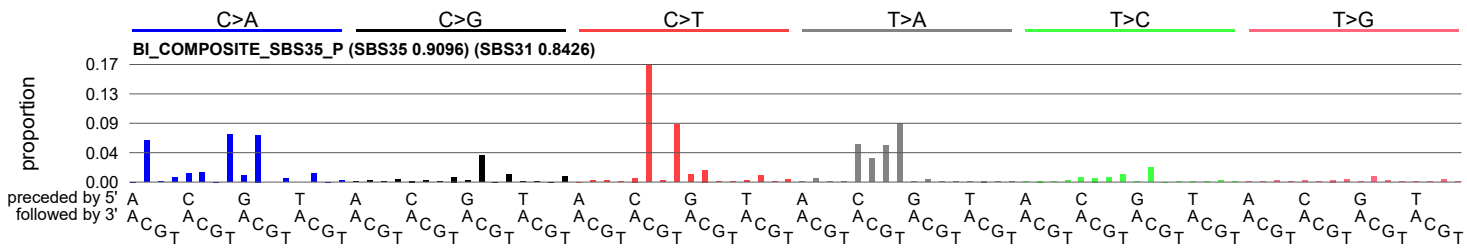

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS26_S (SBS26 0.9745) (SBS54 0.7326)
proportion
0.10
0.07
0.05
0.02
0.00
preceded by 5'
followed by 3'

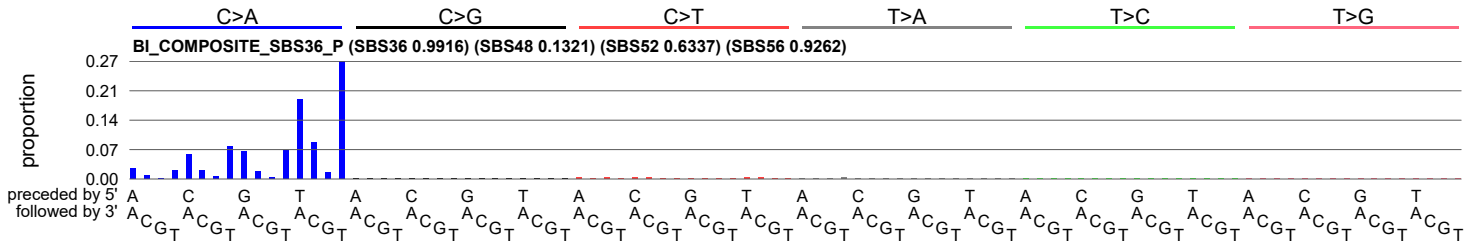

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS28_P (SBS28 0.9026)
proportion
0.21
0.16
0.11
0.05
0.00
preceded by 5'
followed by 3'

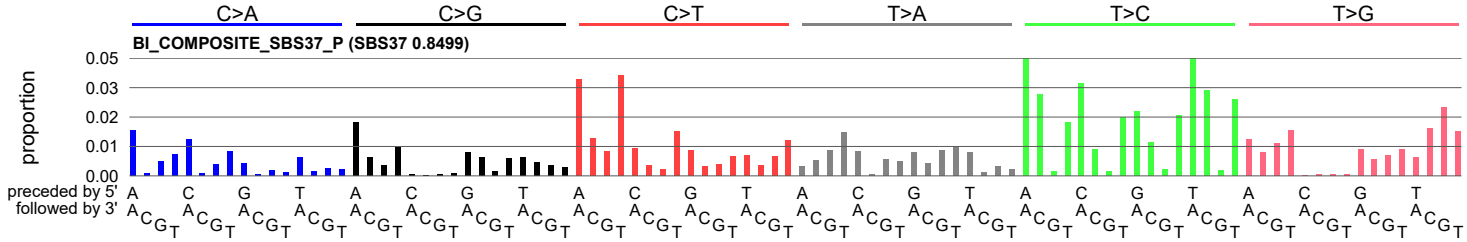

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS78_S (SBS28 0.8672)
proportion
0.24
0.18
0.12
0.06
0.00
preceded by 5'
followed by 3'

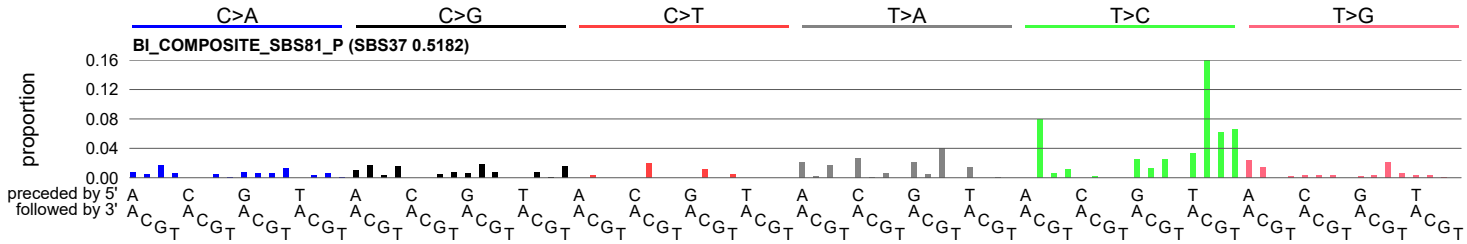

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS30_P (SBS30 0.9312)
proportion
0.10
0.07
0.05
0.02
0.00
preceded by 5'
followed by 3'

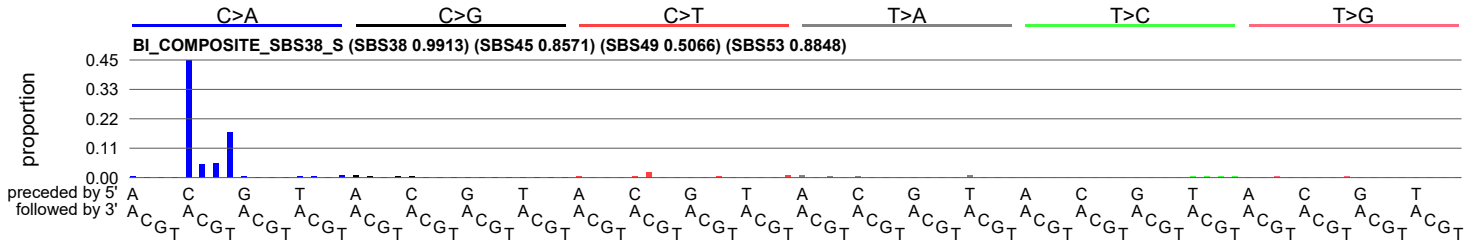

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS33_P (SBS33 0.9871)
proportion
0.40
0.30
0.20
0.10
0.00
preceded by 5'
followed by 3'

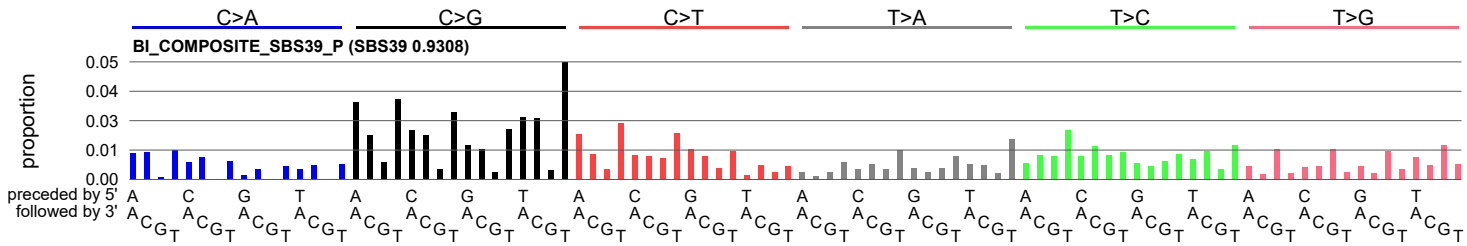

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS35_P (SBS35 0.9096) (SBS31 0.8426)
proportion
0.17
0.13
0.09
0.04
0.00
preceded by 5'
followed by 3'

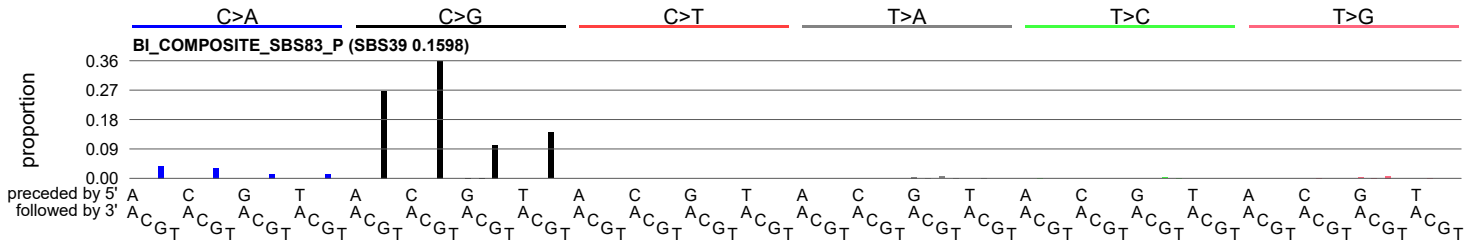

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS36_P (SBS36 0.9916) (SBS48 0.1321) (SBS52 0.6337) (SBS56 0.9262)
proportion
0.27
0.21
0.14
0.07
0.00
preceded by 5'
followed by 3'

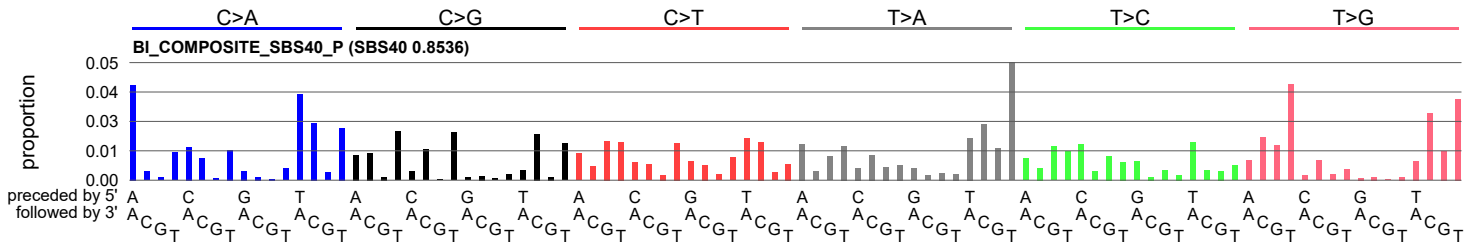

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS37_P (SBS37 0.8499)
proportion
0.05
0.03
0.02
0.01
0.00
preceded by 5'
followed by 3'

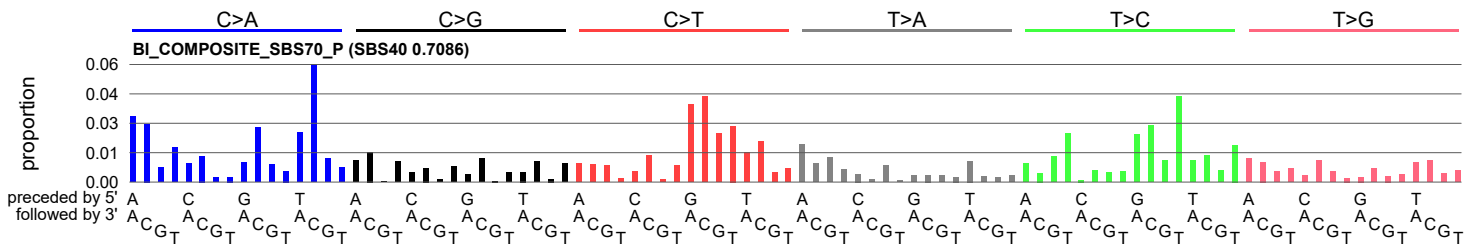

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS81_P (SBS37 0.5182)
proportion
0.16
0.12
0.08
0.04
0.00
preceded by 5'
followed by 3'

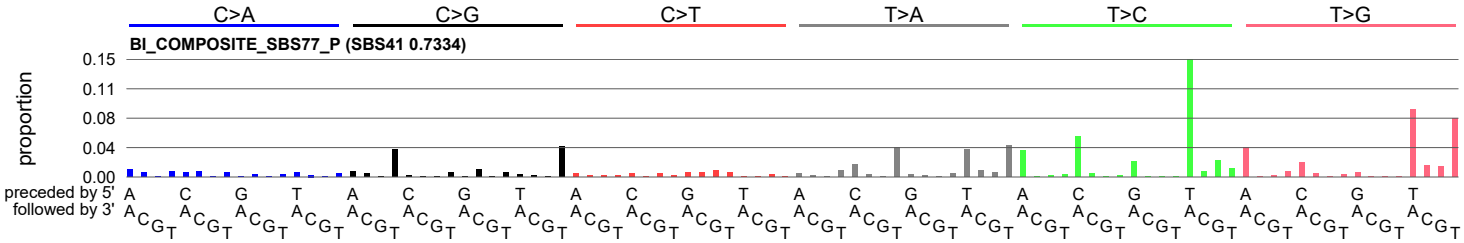

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS38_S (SBS38 0.9913) (SBS45 0.8571) (SBS49 0.5066) (SBS53 0.8848)
proportion
0.45
0.33
0.22
0.11
0.00
preceded by 5'
followed by 3'

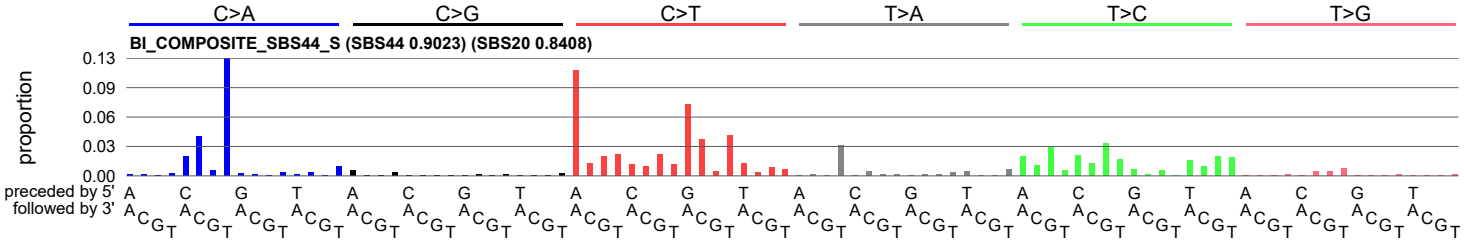

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS39_P (SBS39 0.9308)
proportion
0.05
0.04
0.03
0.01
0.00
preceded by 5'
followed by 3'

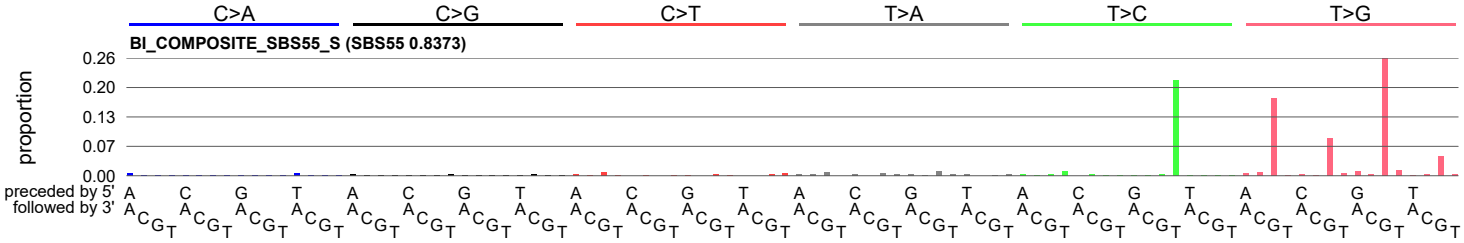

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS83_P (SBS39 0.1598)
proportion
0.36
0.27
0.18
0.09
0.00
preceded by 5'
followed by 3'

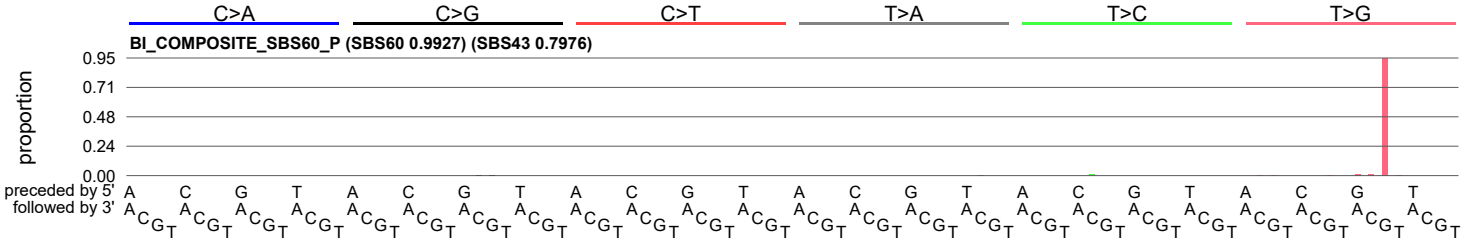

C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS40_P (SBS40 0.8536)
proportion
0.05
0.04
0.03
0.01
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS70_P (SBS40 0.7086)
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
BI_COMPOSITE_SBS77_P (SBS41 0.7334)
proportion
0.15
0.11
0.08
0.04
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
BI_COMPOSITE_SBS44_S (SBS44 0.9023) (SBS20 0.8408)
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
BI_COMPOSITE_SBS55_S (SBS55 0.8373)
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
BI_COMPOSITE_SBS60_P (SBS60 0.9927) (SBS43 0.7976)
proportion
0.95
0.71
0.48
0.24
0.00
preceded by 5'
followed by 3'