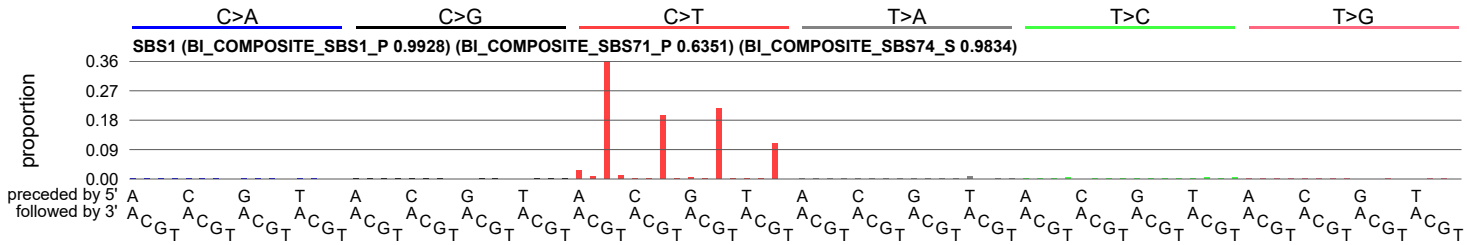
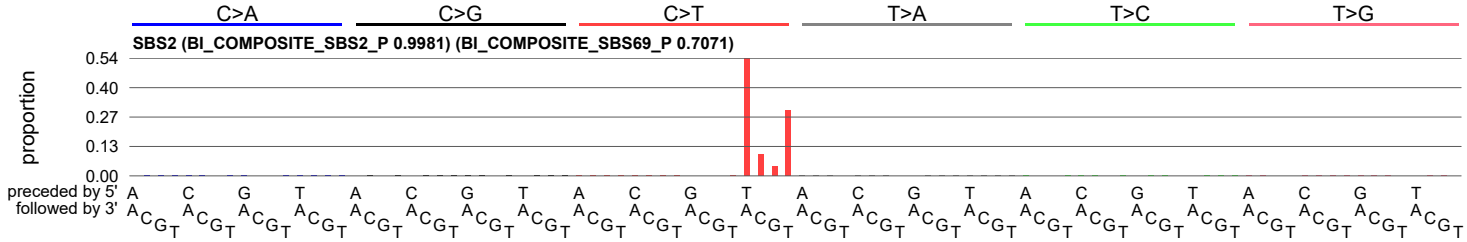
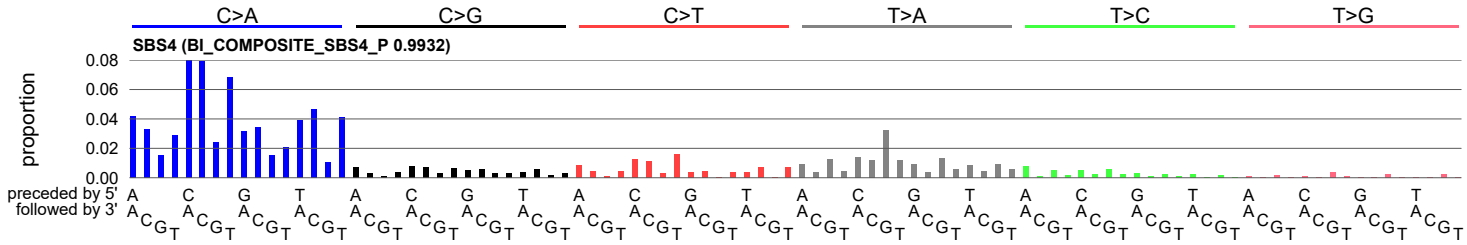
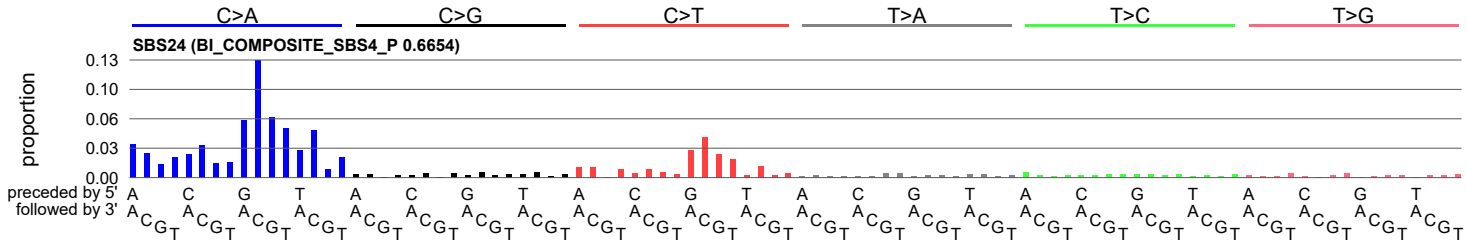
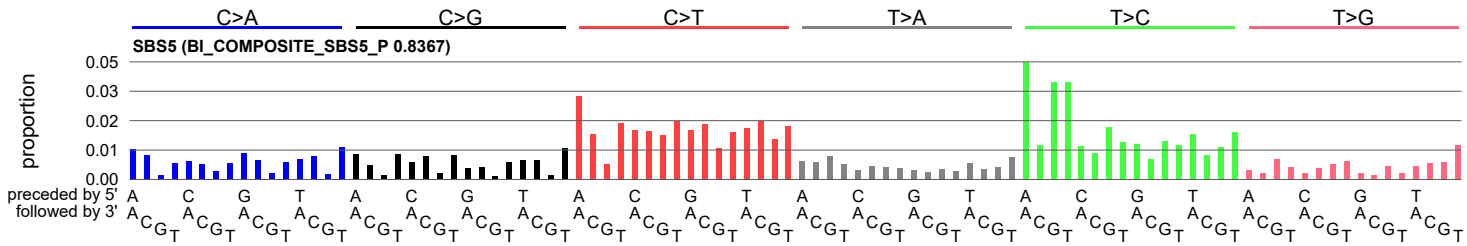
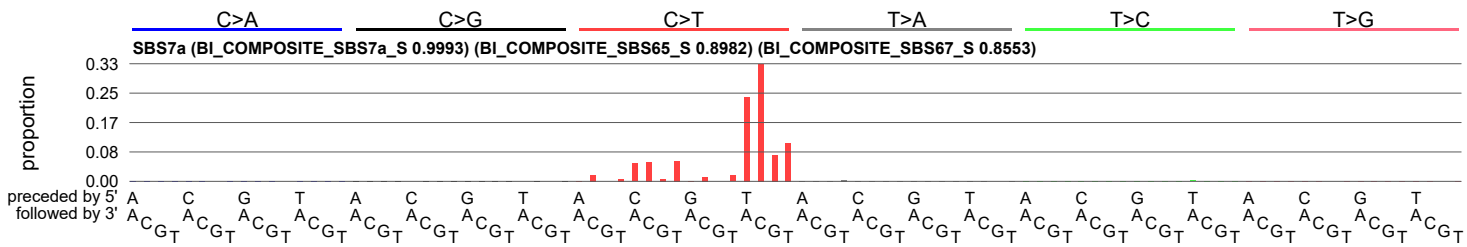

C>A
C>G
C>T
T>A
T>C
T>G
SBS1 (BI_COMPOSITE_SBS1_P 0.9928) (BI_COMPOSITE_SBS71_P 0.6351) (BI_COMPOSITE_SBS74_S 0.9834)
proportion
0.36
0.27
0.18
0.09
0.00
preceded by 5'
followed by 3'

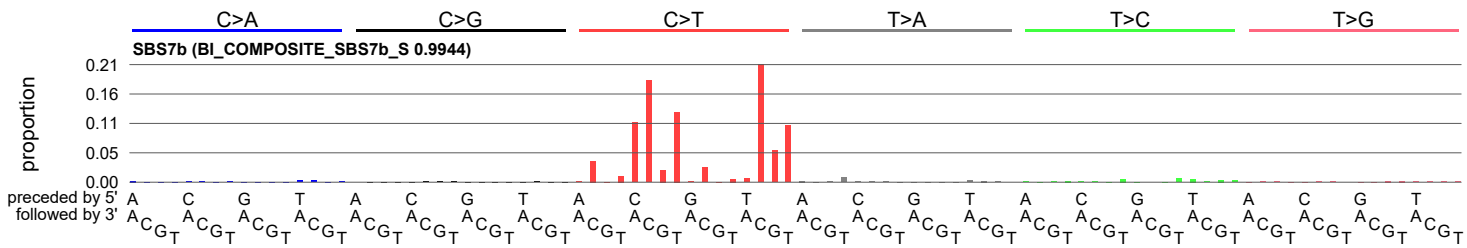

C>A
C>G
C>T
T>A
T>C
T>G
SBS2 (BI_COMPOSITE_SBS2_P 0.9981) (BI_COMPOSITE_SBS69_P 0.7071)
proportion
0.54
0.40
0.27
0.13
0.00
preceded by 5'
followed by 3'

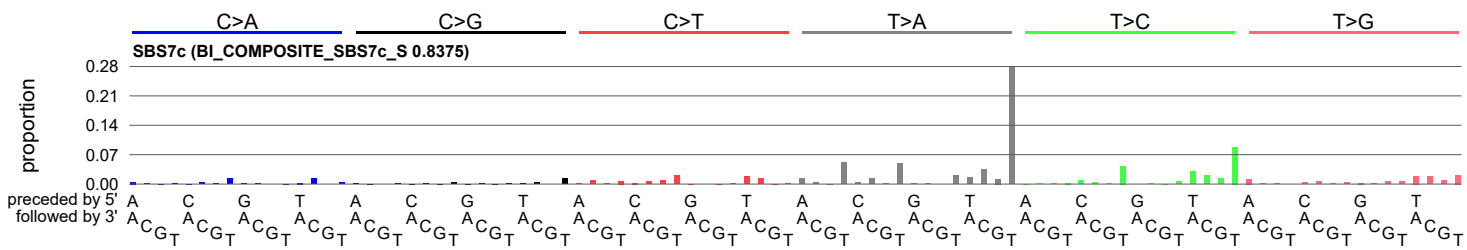

C>A
C>G
C>T
T>A
T>C
T>G
SBS4 (BI_COMPOSITE_SBS4_P 0.9932)
proportion
0.08
0.06
0.04
0.02
0.00
preceded by 5'
followed by 3'

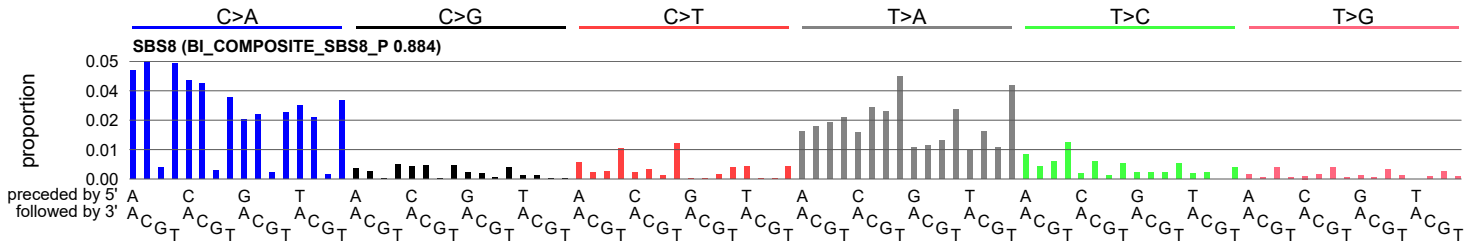

C>A
C>G
C>T
T>A
T>C
T>G
SBS24 (BI_COMPOSITE_SBS4_P 0.6654)
proportion
0.13
0.10
0.06
0.03
0.00
preceded by 5'
followed by 3'

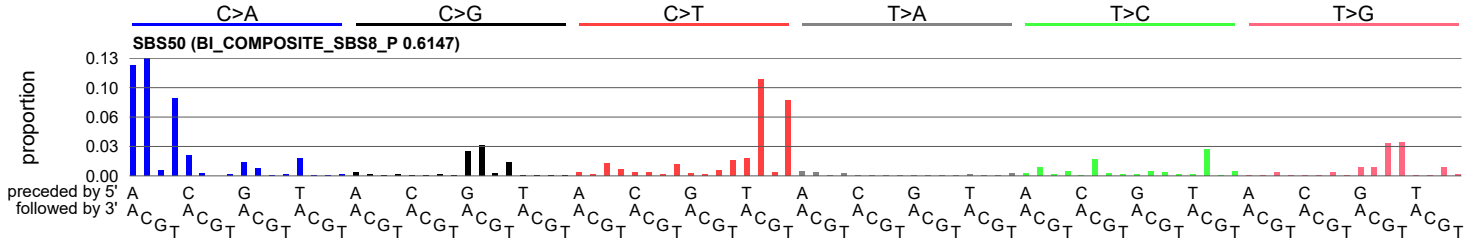

C>A
C>G
C>T
T>A
T>C
T>G
SBS5 (BI_COMPOSITE_SBS5_P 0.8367)
proportion
0.05
0.03
0.02
0.01
0.00
preceded by 5'
followed by 3'

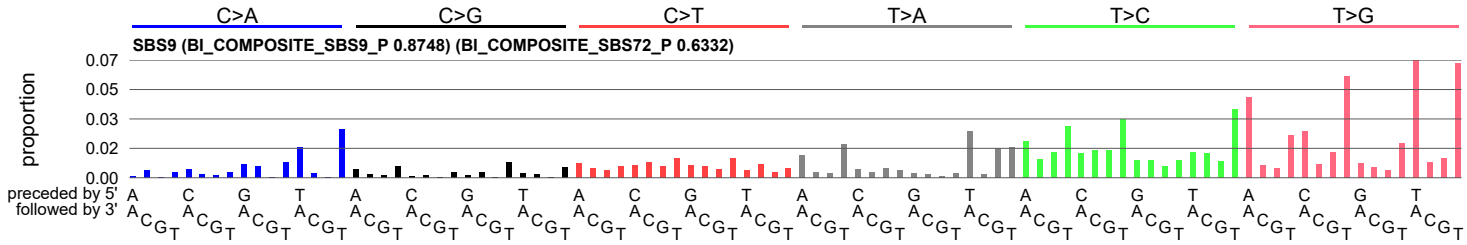

C>A
C>G
C>T
T>A
T>C
T>G
SBS7a (BI_COMPOSITE_SBS7a_S 0.9993) (BI_COMPOSITE_SBS65_S 0.8982) (BI_COMPOSITE_SBS67_S 0.8553)
proportion
0.33
0.25
0.17
0.08
0.00
preceded by 5'
followed by 3'

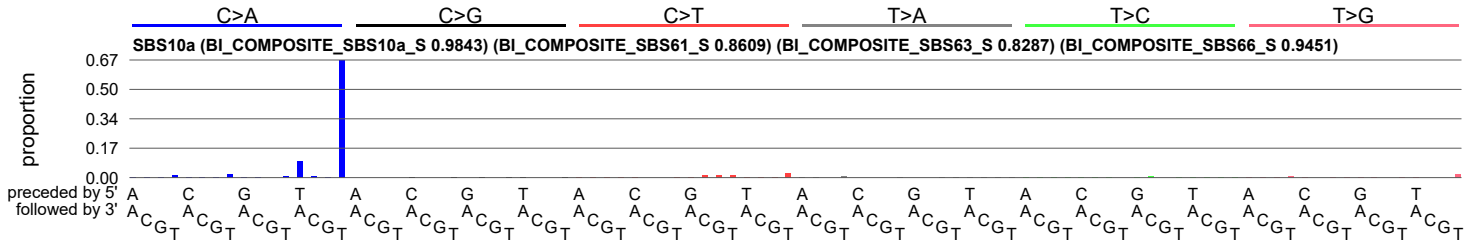

C>A
C>G
C>T
T>A
T>C
T>G
SBS7b (BI_COMPOSITE_SBS7b_S 0.9944)
proportion
0.21
0.16
0.11
0.05
0.00
preceded by 5'
followed by 3'

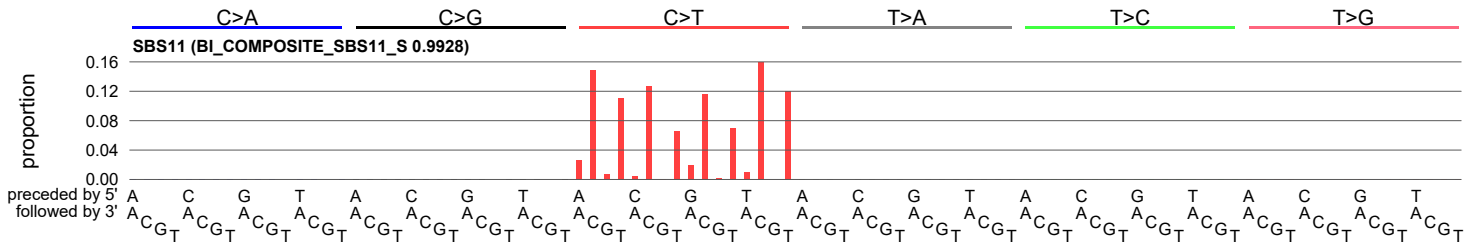

C>A
C>G
C>T
T>A
T>C
T>G
SBS7c (BI_COMPOSITE_SBS7c_S 0.8375)
proportion
0.28
0.21
0.14
0.07
0.00
preceded by 5'
followed by 3'

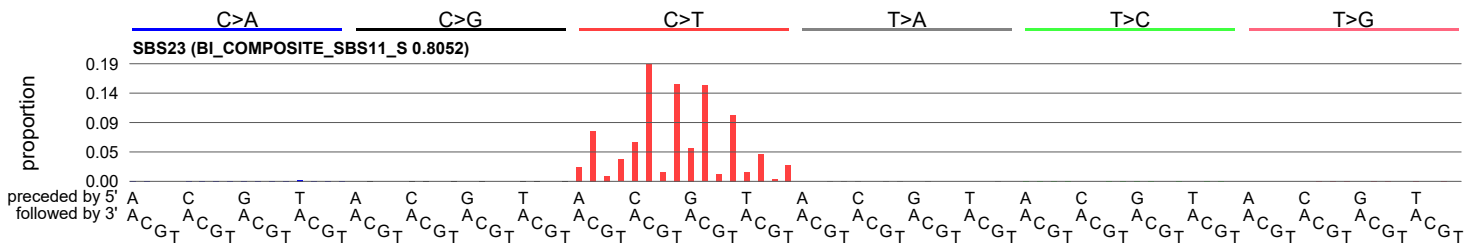

C>A
C>G
C>T
T>A
T>C
T>G
SBS8 (BI_COMPOSITE_SBS8_P 0.884)
proportion
0.05
0.04
0.02
0.01
0.00
preceded by 5'
followed by 3'

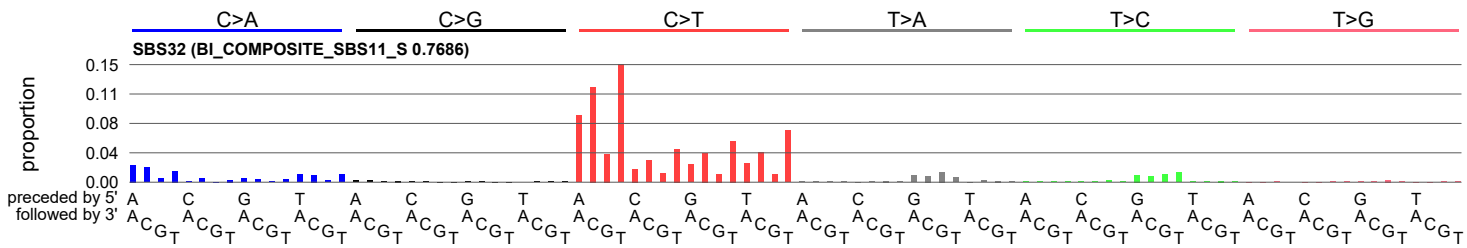

C>A
C>G
C>T
T>A
T>C
T>G
SBS50 (BI_COMPOSITE_SBS8_P 0.6147)
proportion
0.13
0.10
0.06
0.03
0.00
preceded by 5'
followed by 3'

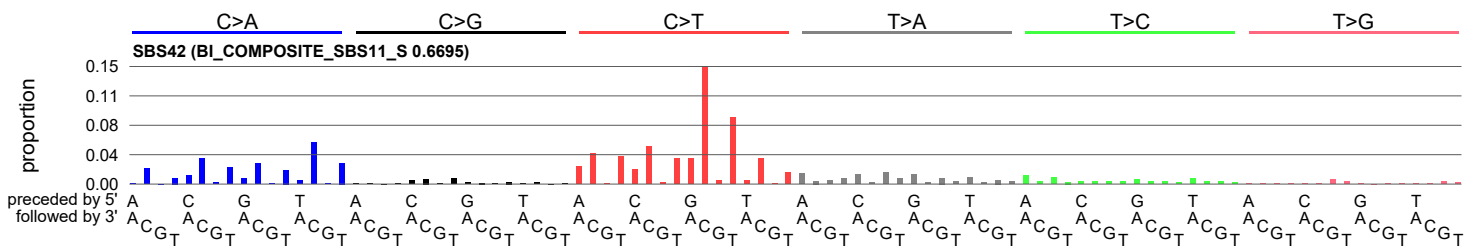

C>A
C>G
C>T
T>A
T>C
T>G
SBS9 (BI_COMPOSITE_SBS9_P 0.8748) (BI_COMPOSITE_SBS72_P 0.6332)
proportion
0.07
0.05
0.03
0.02
0.00
preceded by 5'
followed by 3'

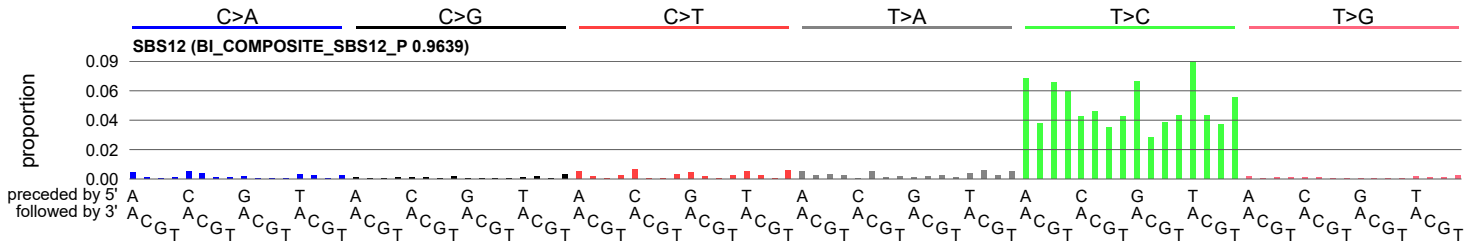

C>A
C>G
C>T
T>A
T>C
T>G
SBS10a (BI_COMPOSITE_SBS10a_S 0.9843) (BI_COMPOSITE_SBS61_S 0.8609) (BI_COMPOSITE_SBS63_S 0.8287) (BI_COMPOSITE_SBS66_S 0.9451)
proportion
0.67
0.50
0.34
0.17
0.00
preceded by 5'
followed by 3'

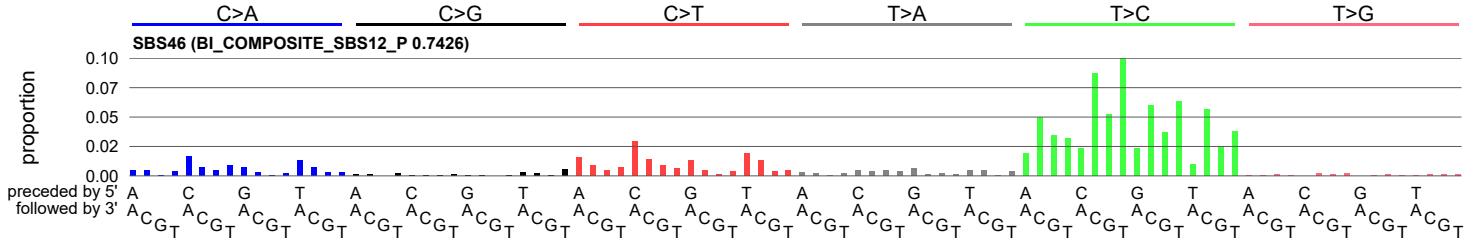

C>A
C>G
C>T
T>A
T>C
T>G
SBS11 (BI_COMPOSITE_SBS11_S 0.9928)
proportion
0.16
0.12
0.08
0.04
0.00
preceded by 5'
followed by 3'

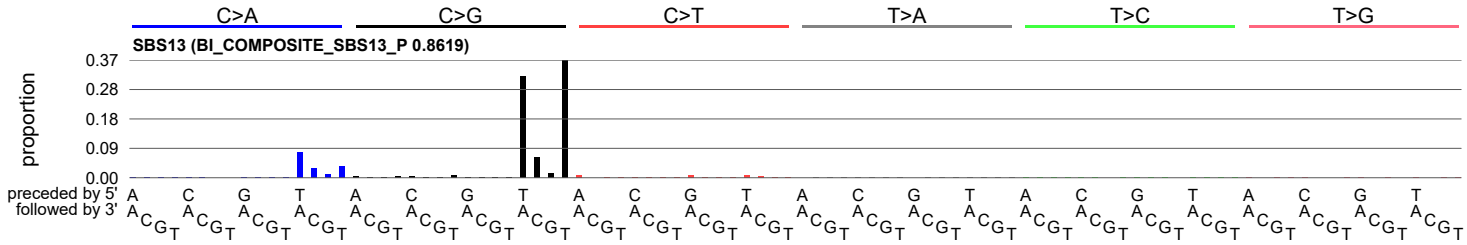

C>A
C>G
C>T
T>A
T>C
T>G
SBS23 (BI_COMPOSITE_SBS11_S 0.8052)
proportion
0.19
0.14
0.09
0.05
0.00
preceded by 5'
followed by 3'

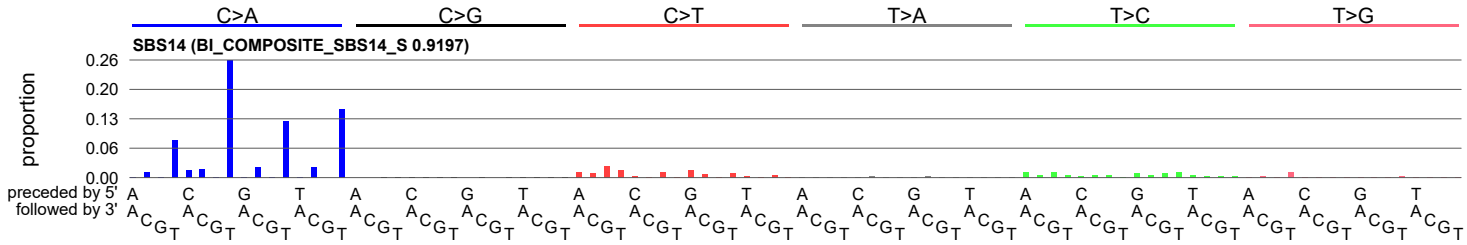

C>A
C>G
C>T
T>A
T>C
T>G
SBS32 (BI_COMPOSITE_SBS11_S 0.7686)
proportion
0.15
0.11
0.08
0.04
0.00
preceded by 5'
followed by 3'

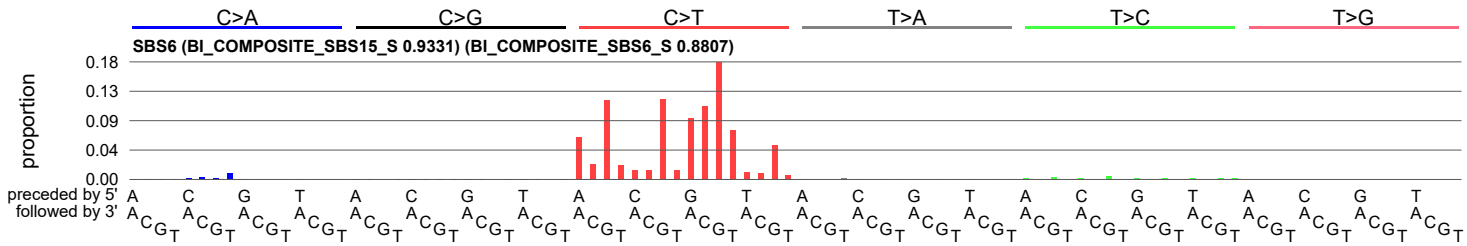

C>A
C>G
C>T
T>A
T>C
T>G
SBS42 (BI_COMPOSITE_SBS11_S 0.6695)
proportion
0.15
0.11
0.08
0.04
0.00
preceded by 5'
followed by 3'

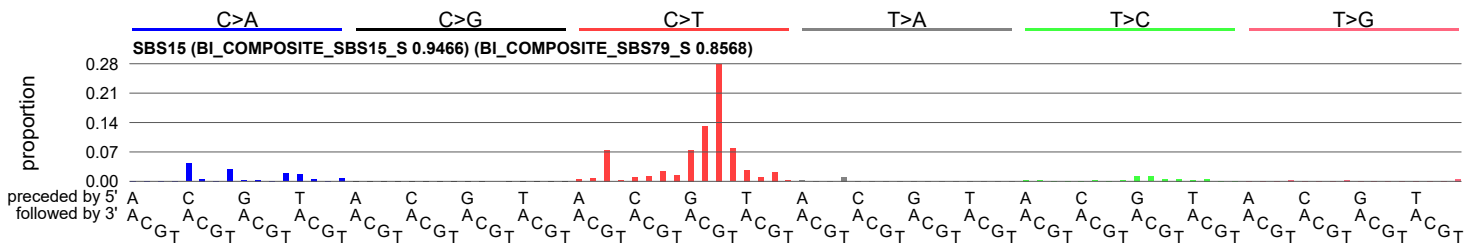

C>A
C>G
C>T
T>A
T>C
T>G
SBS12 (BI_COMPOSITE_SBS12_P 0.9639)
proportion
0.09
0.06
0.04
0.02
0.00
preceded by 5'
followed by 3'

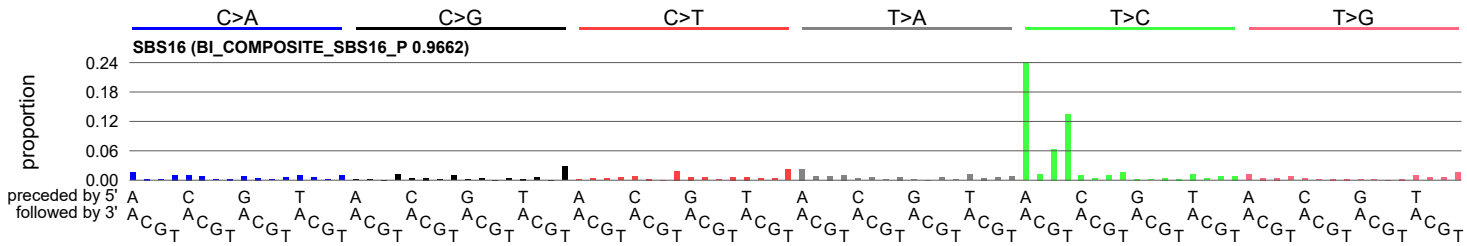

C>A
C>G
C>T
T>A
T>C
T>G
SBS46 (BI_COMPOSITE_SBS12_P 0.7426)
proportion
0.10
0.07
0.05
0.02
0.00
preceded by 5'
followed by 3'

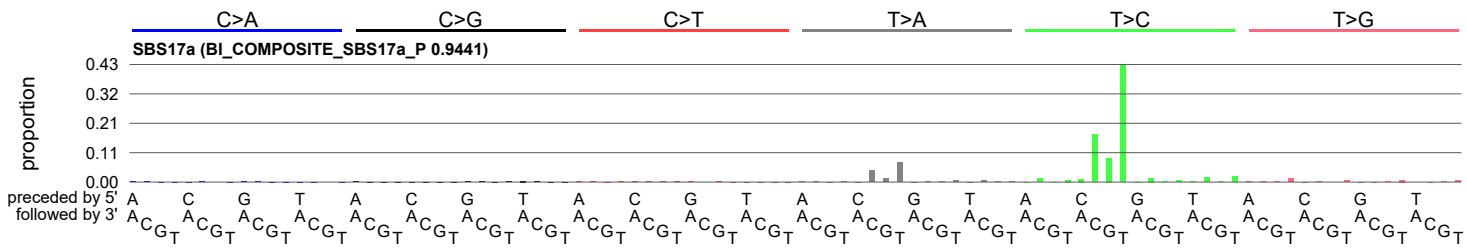

C>A
C>G
C>T
T>A
T>C
T>G
SBS13 (BI_COMPOSITE_SBS13_P 0.8619)
proportion
0.37
0.28
0.18
0.09
0.00
preceded by 5'
followed by 3'

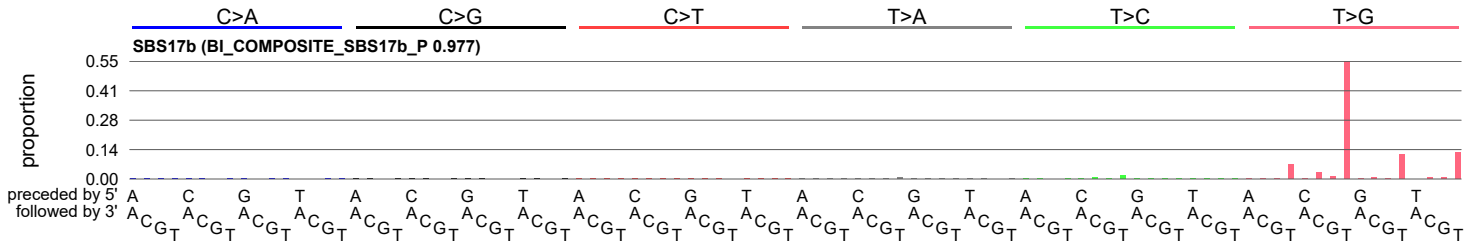

C>A
C>G
C>T
T>A
T>C
T>G
SBS14 (BI_COMPOSITE_SBS14_S 0.9197)
proportion
0.26
0.20
0.13
0.06
0.00
preceded by 5'
followed by 3'

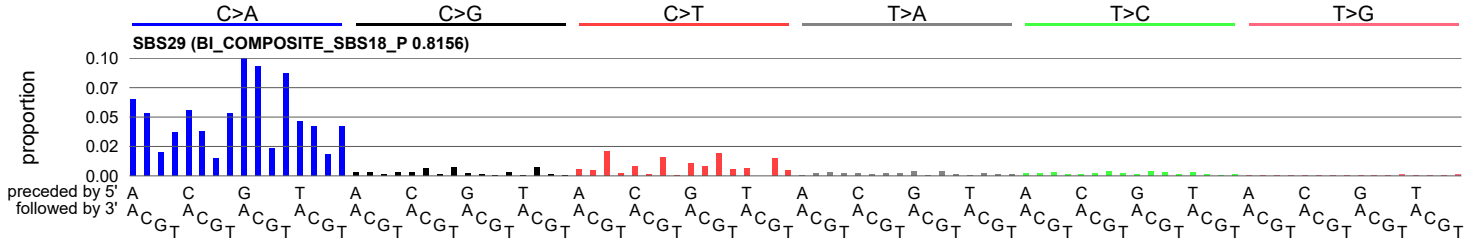

C>A
C>G
C>T
T>A
T>C
T>G
SBS6 (BI_COMPOSITE_SBS15_S 0.9331) (BI_COMPOSITE_SBS6_S 0.8807)
proportion
0.18
0.13
0.09
0.04
0.00
preceded by 5'
followed by 3'

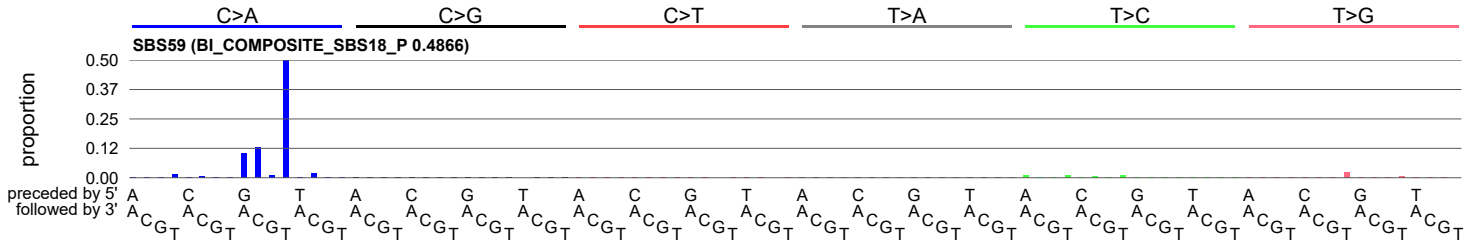

C>A
C>G
C>T
T>A
T>C
T>G
SBS15 (BI_COMPOSITE_SBS15_S 0.9466) (BI_COMPOSITE_SBS79_S 0.8568)
proportion
0.28
0.21
0.14
0.07
0.00
preceded by 5'
followed by 3'

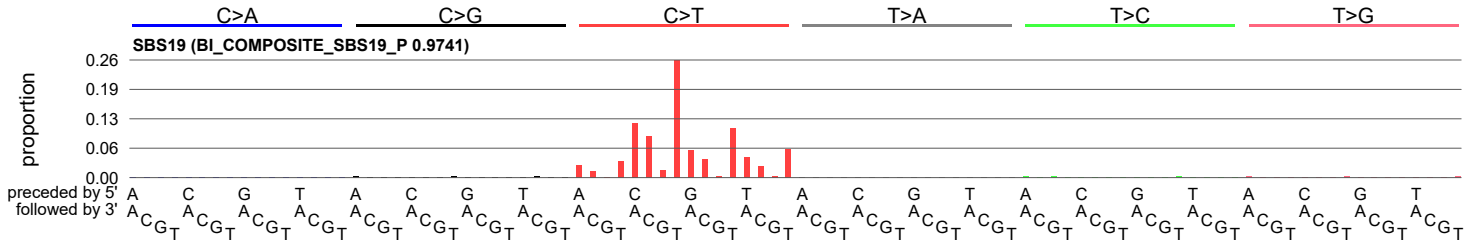

C>A
C>G
C>T
T>A
T>C
T>G
SBS16 (BI_COMPOSITE_SBS16_P 0.9662)
proportion
0.24
0.18
0.12
0.06
0.00
preceded by 5'
followed by 3'

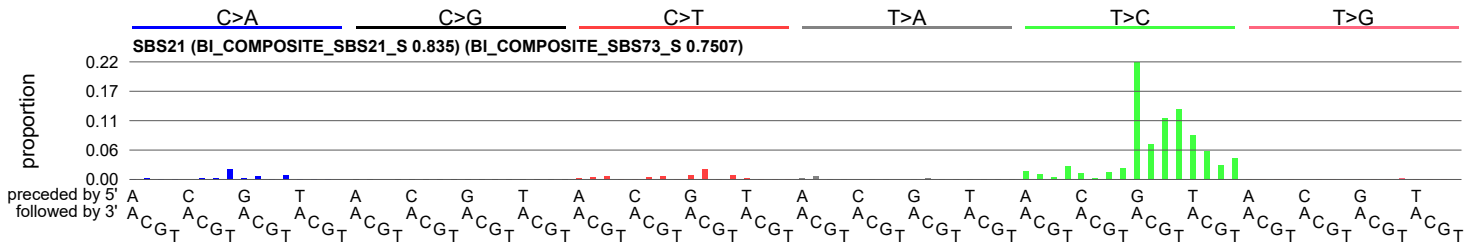

C>A
C>G
C>T
T>A
T>C
T>G
SBS17a (BI_COMPOSITE_SBS17a_P 0.9441)
proportion
0.43
0.32
0.21
0.11
0.00
preceded by 5'
followed by 3'

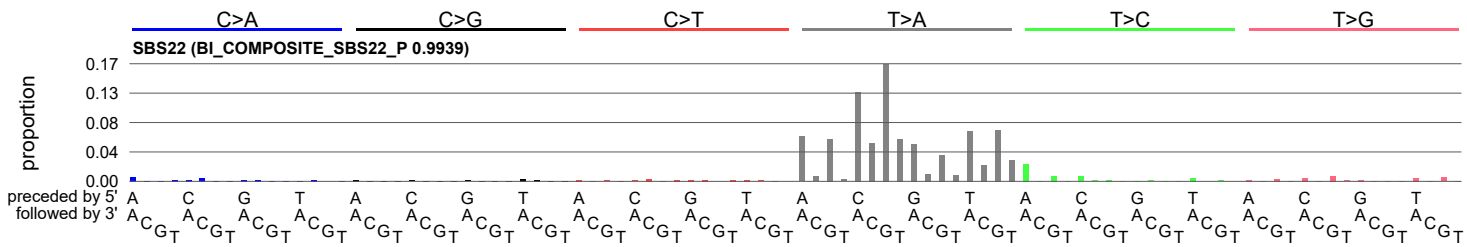

C>A
C>G
C>T
T>A
T>C
T>G
SBS17b (BI_COMPOSITE_SBS17b_P 0.977)
proportion
0.55
0.41
0.28
0.14
0.00
preceded by 5'
followed by 3'

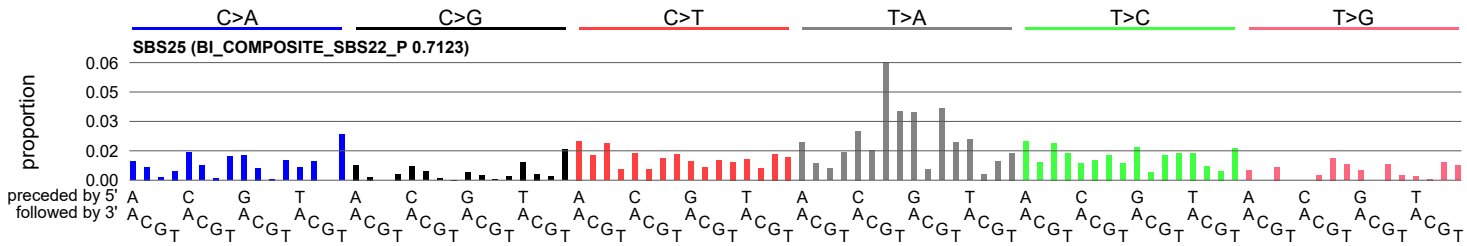

C>A
C>G
C>T
T>A
T>C
T>G
SBS29 (BI_COMPOSITE_SBS18_P 0.8156)
proportion
0.10
0.07
0.05
0.02
0.00
preceded by 5'
followed by 3'

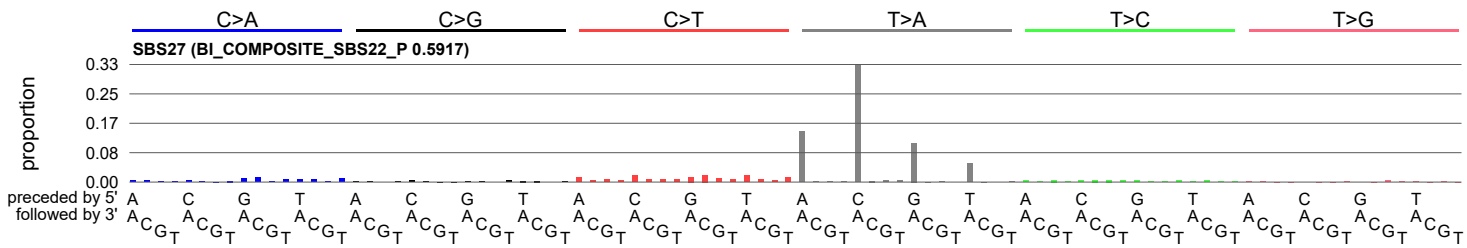

C>A
C>G
C>T
T>A
T>C
T>G
SBS59 (BI_COMPOSITE_SBS18_P 0.4866)
proportion
0.50
0.37
0.25
0.12
0.00
preceded by 5'
followed by 3'

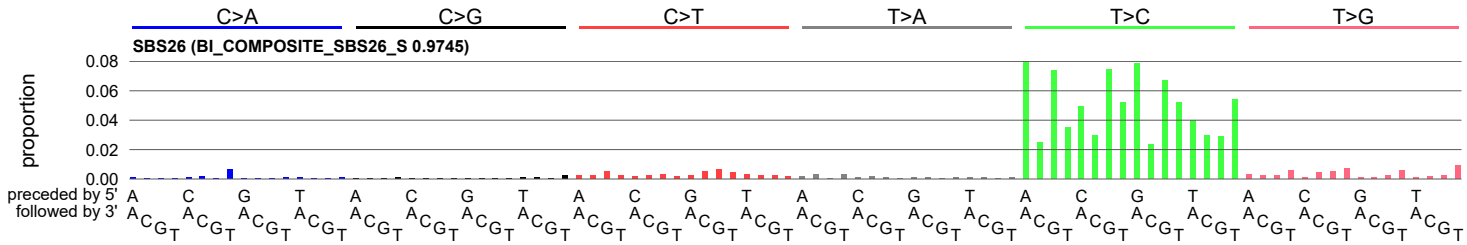

C>A
C>G
C>T
T>A
T>C
T>G
SBS19 (BI_COMPOSITE_SBS19_P 0.9741)
proportion
0.26
0.19
0.13
0.06
0.00
preceded by 5'
followed by 3'

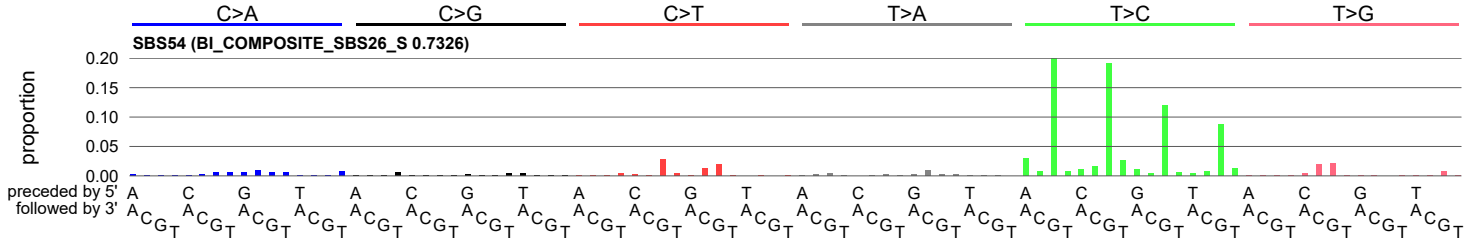

C>A
C>G
C>T
T>A
T>C
T>G
SBS21 (BI_COMPOSITE_SBS21_S 0.835) (BI_COMPOSITE_SBS73_S 0.7507)
proportion
0.22
0.17
0.11
0.06
0.00
preceded by 5'
followed by 3'

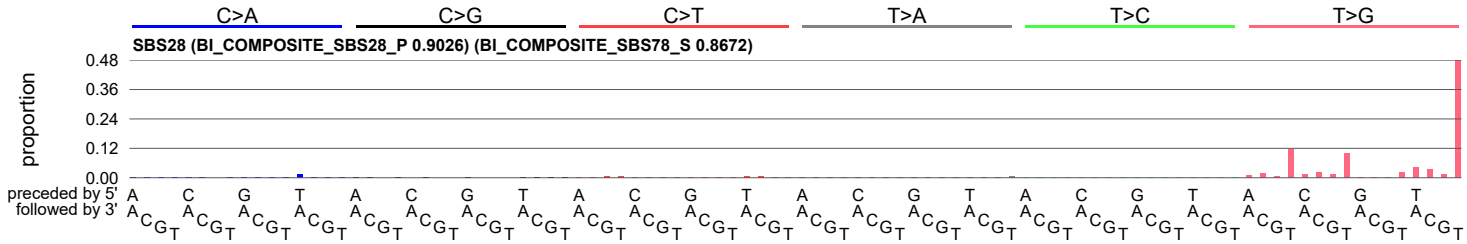

C>A
C>G
C>T
T>A
T>C
T>G
SBS22 (BI_COMPOSITE_SBS22_P 0.9939)
proportion
0.17
0.13
0.08
0.04
0.00
preceded by 5'
followed by 3'

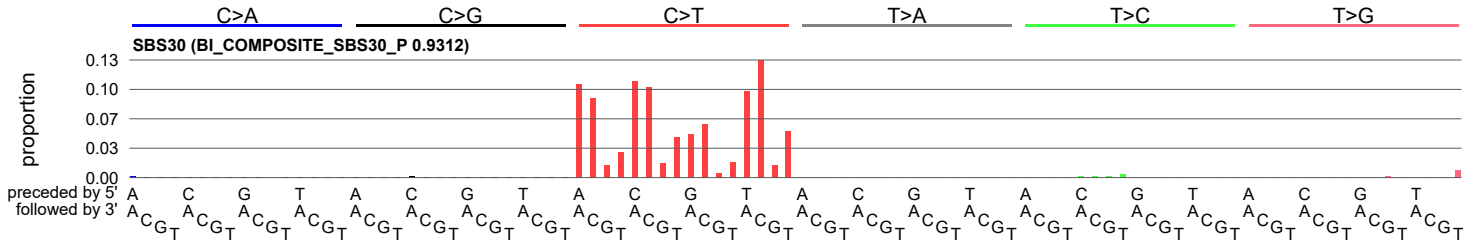

C>A
C>G
C>T
T>A
T>C
T>G
SBS25 (BI_COMPOSITE_SBS22_P 0.7123)
proportion
0.06
0.05
0.03
0.02
0.00
preceded by 5'
followed by 3'

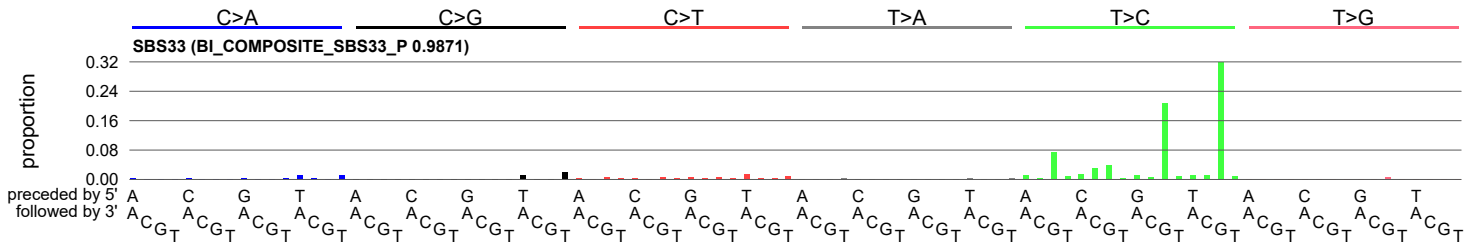

C>A
C>G
C>T
T>A
T>C
T>G
SBS27 (BI_COMPOSITE_SBS22_P 0.5917)
proportion
0.33
0.25
0.17
0.08
0.00
preceded by 5'
followed by 3'

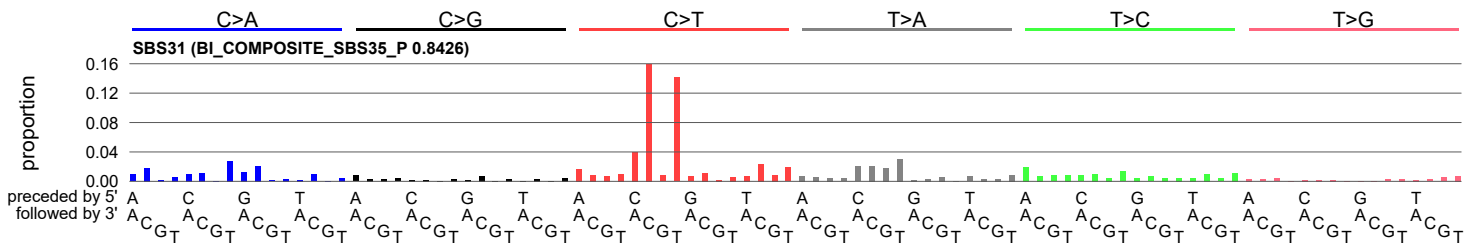

C>A
C>G
C>T
T>A
T>C
T>G
SBS26 (BI_COMPOSITE_SBS26_S 0.9745)
proportion
0.08
0.06
0.04
0.02
0.00
preceded by 5'
followed by 3'

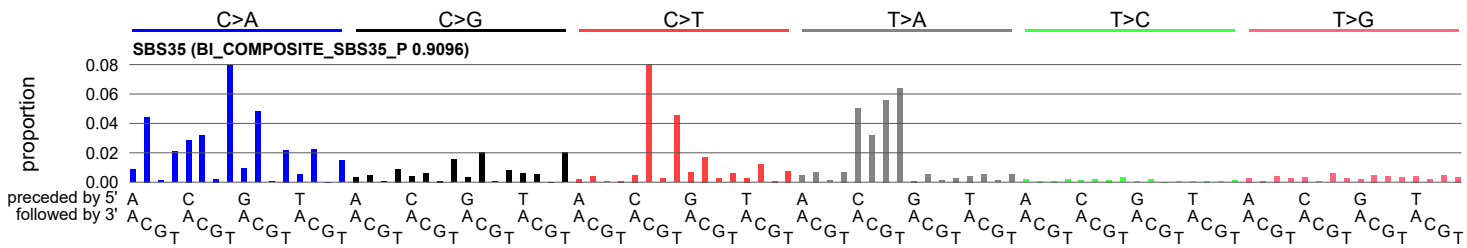

C>A
C>G
C>T
T>A
T>C
T>G
SBS54 (BI_COMPOSITE_SBS26_S 0.7326)
proportion
0.20
0.15
0.10
0.05
0.00
preceded by 5'
followed by 3'

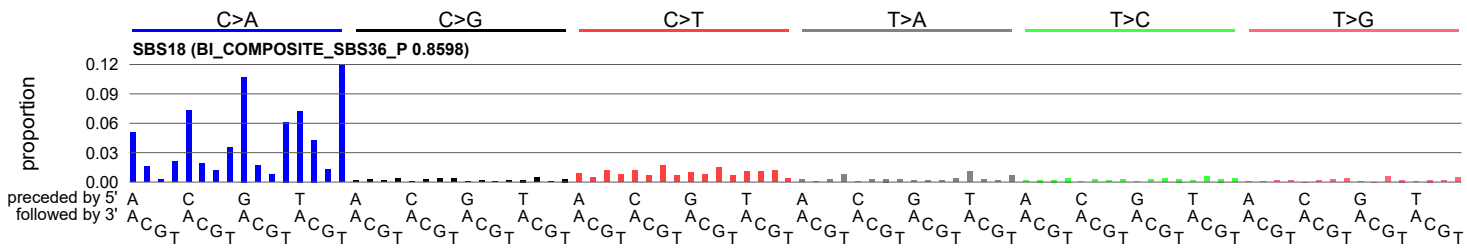

C>A
C>G
C>T
T>A
T>C
T>G
SBS28 (BI_COMPOSITE_SBS28_P 0.9026) (BI_COMPOSITE_SBS78_S 0.8672)
proportion
0.48
0.36
0.24
0.12
0.00
preceded by 5'
followed by 3'

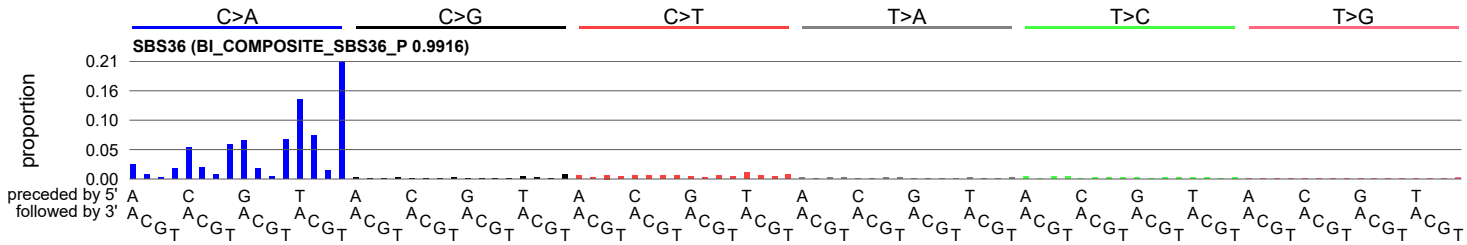

C>A
C>G
C>T
T>A
T>C
T>G
SBS30 (BI_COMPOSITE_SBS30_P 0.9312)
proportion
0.13
0.10
0.07
0.03
0.00
preceded by 5'
followed by 3'

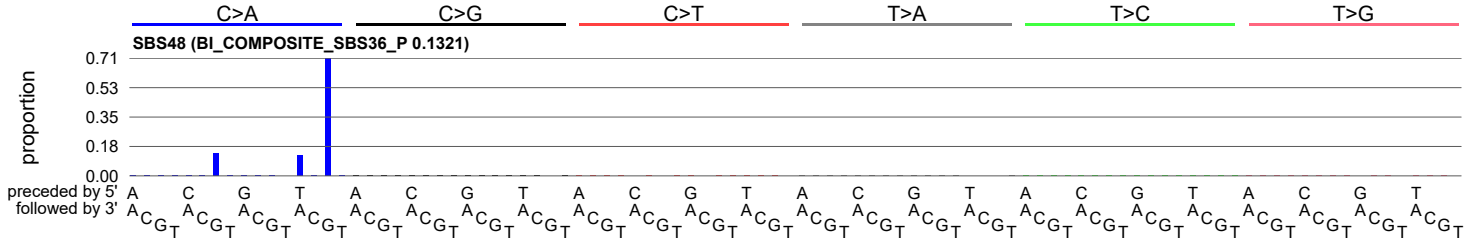

C>A
C>G
C>T
T>A
T>C
T>G
SBS33 (BI_COMPOSITE_SBS33_P 0.9871)
proportion
0.32
0.24
0.16
0.08
0.00
preceded by 5'
followed by 3'

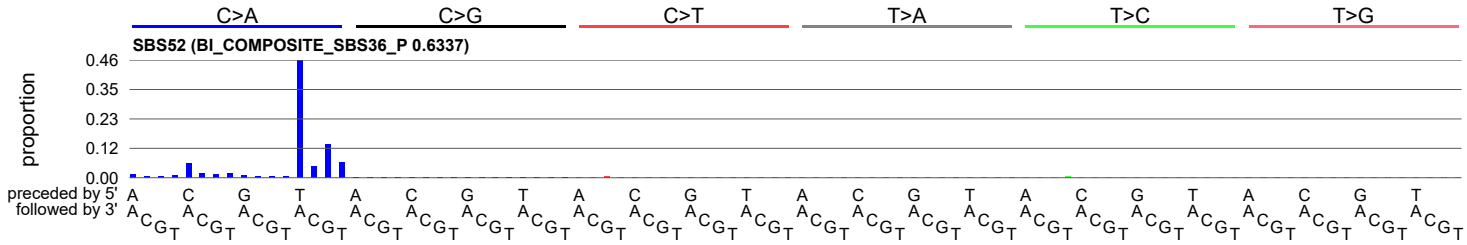

C>A
C>G
C>T
T>A
T>C
T>G
SBS31 (BI_COMPOSITE_SBS35_P 0.8426)
proportion
0.16
0.12
0.08
0.04
0.00
preceded by 5'
followed by 3'

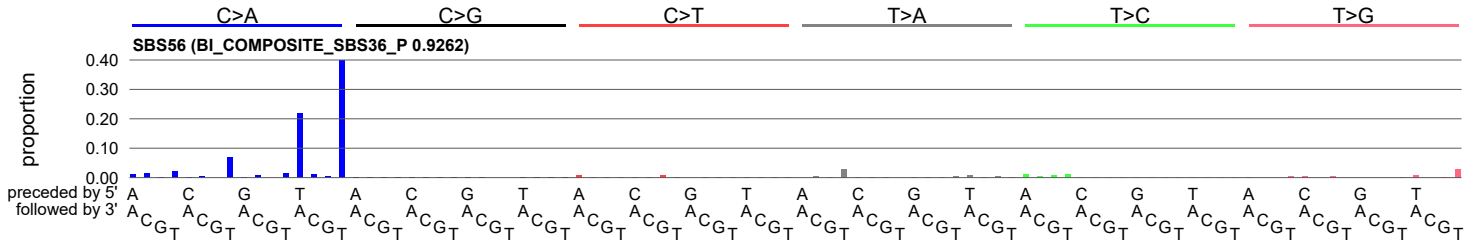

C>A
C>G
C>T
T>A
T>C
T>G
SBS35 (BI_COMPOSITE_SBS35_P 0.9096)
proportion
0.08
0.06
0.04
0.02
0.00
preceded by 5'
followed by 3'

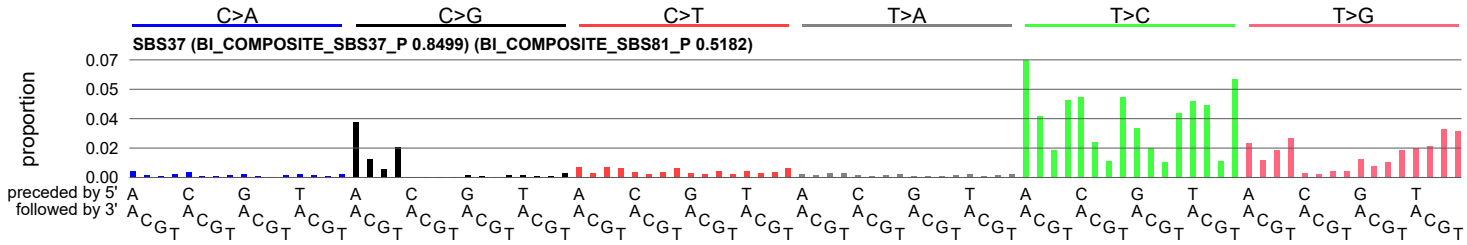

C>A
C>G
C>T
T>A
T>C
T>G
SBS18 (BI_COMPOSITE_SBS36_P 0.8598)
proportion
0.12
0.09
0.06
0.03
0.00
preceded by 5'
followed by 3'

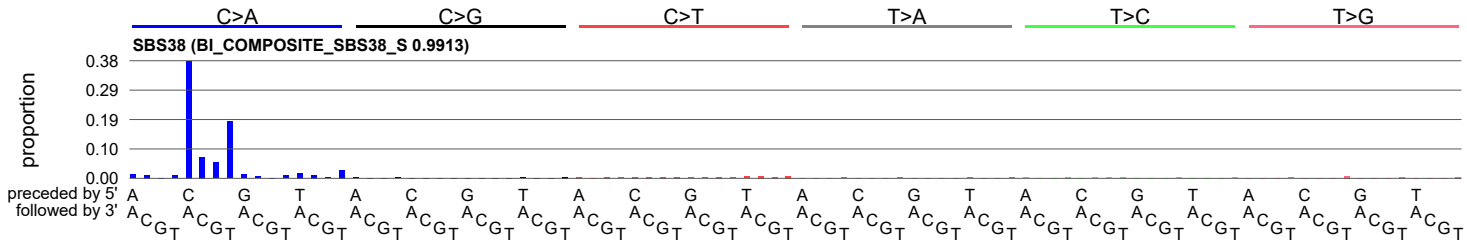

C>A
C>G
C>T
T>A
T>C
T>G
SBS36 (BI_COMPOSITE_SBS36_P 0.9916)
proportion
0.21
0.16
0.10
0.05
0.00
preceded by 5'
followed by 3'

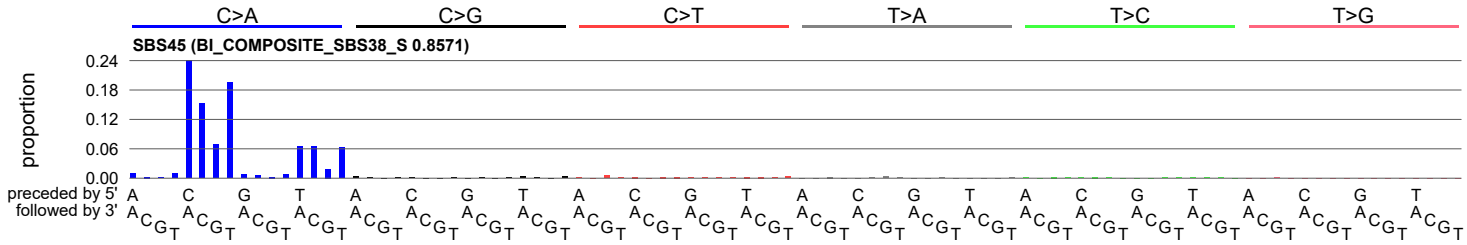

C>A
C>G
C>T
T>A
T>C
T>G
SBS48 (BI_COMPOSITE_SBS36_P 0.1321)
proportion
0.71
0.53
0.35
0.18
0.00
preceded by 5'
followed by 3'

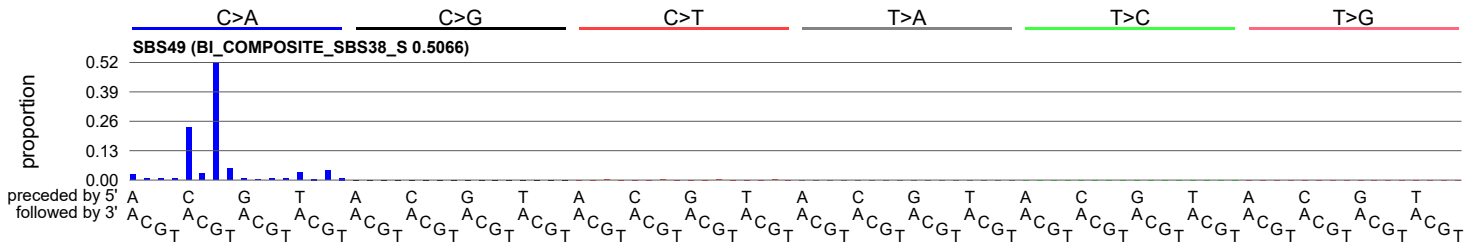

C>A
C>G
C>T
T>A
T>C
T>G
SBS52 (BI_COMPOSITE_SBS36_P 0.6337)
proportion
0.46
0.35
0.23
0.12
0.00
preceded by 5'
followed by 3'

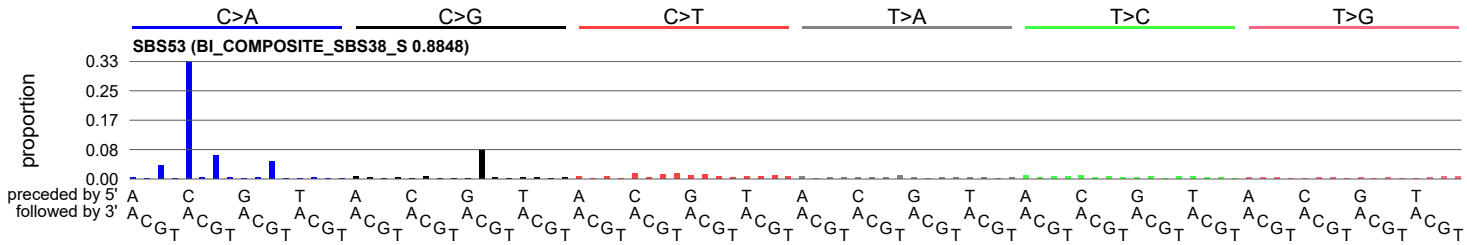

C>A
C>G
C>T
T>A
T>C
T>G
SBS56 (BI_COMPOSITE_SBS36_P 0.9262)
proportion
0.40
0.30
0.20
0.10
0.00
preceded by 5'
followed by 3'

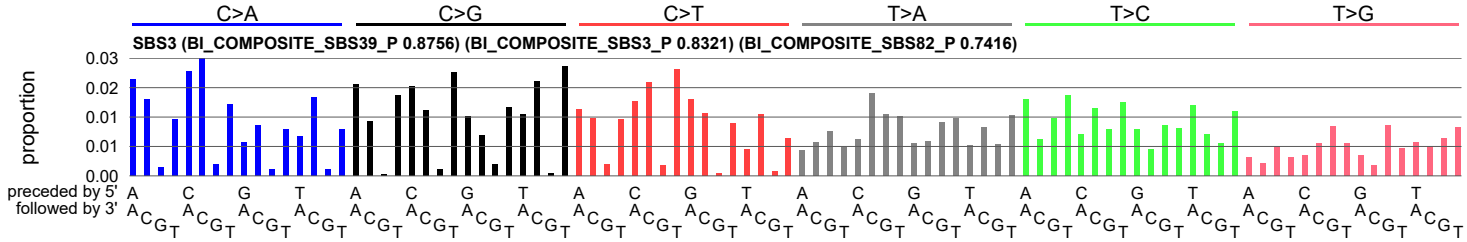

C>A
C>G
C>T
T>A
T>C
T>G
SBS37 (BI_COMPOSITE_SBS37_P 0.8499) (BI_COMPOSITE_SBS81_P 0.5182)
proportion
0.07
0.05
0.04
0.02
0.00
preceded by 5'
followed by 3'

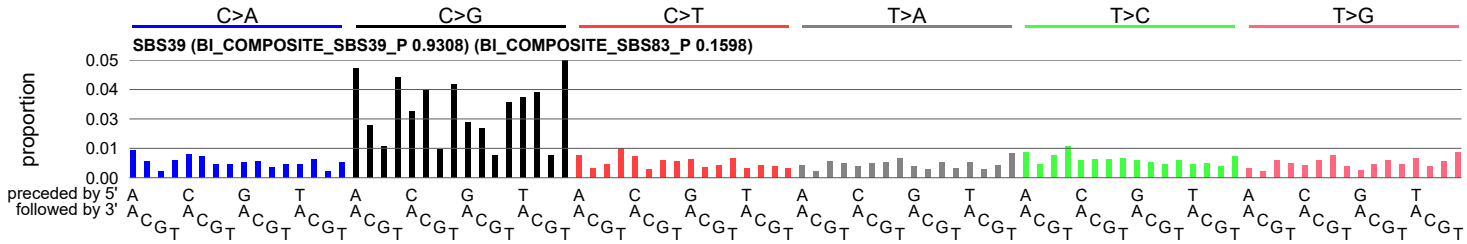

C>A
C>G
C>T
T>A
T>C
T>G
SBS38 (BI_COMPOSITE_SBS38_S 0.9913)
proportion
0.38
0.29
0.19
0.10
0.00
preceded by 5'
followed by 3'

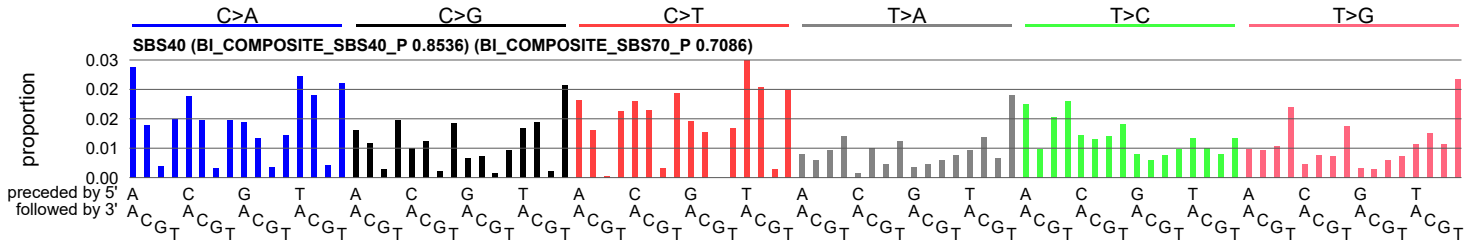

C>A
C>G
C>T
T>A
T>C
T>G
SBS45 (BI_COMPOSITE_SBS38_S 0.8571)
proportion
0.24
0.18
0.12
0.06
0.00
preceded by 5'
followed by 3'

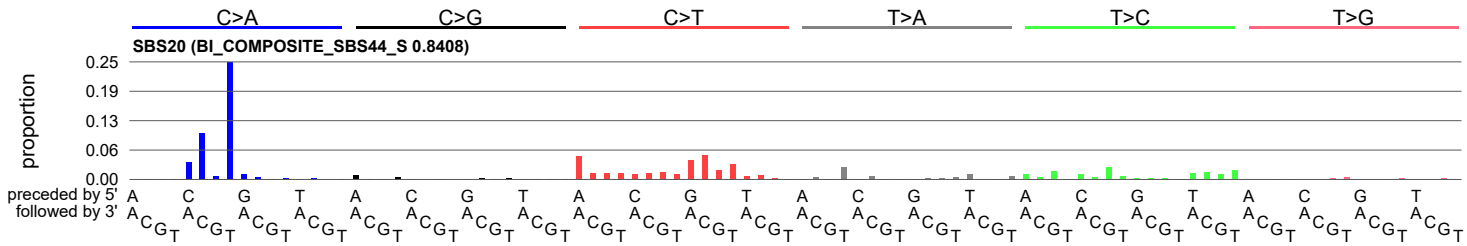

C>A
C>G
C>T
T>A
T>C
T>G
SBS49 (BI_COMPOSITE_SBS38_S 0.5066)
proportion
0.52
0.39
0.26
0.13
0.00
preceded by 5'
followed by 3'

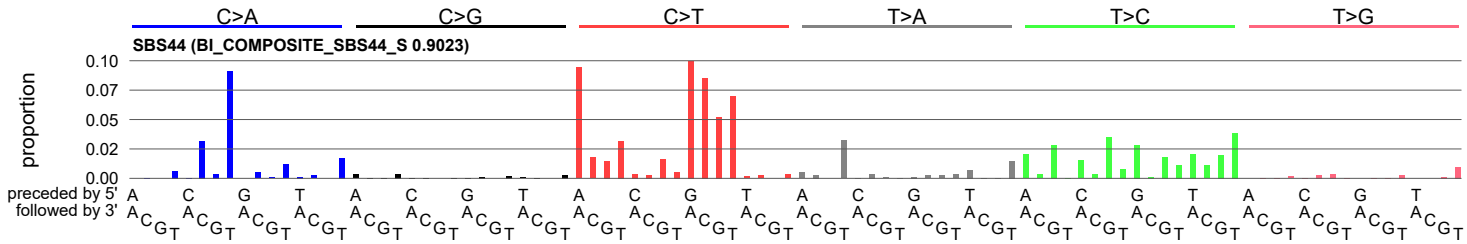

C>A
C>G
C>T
T>A
T>C
T>G
SBS53 (BI_COMPOSITE_SBS38_S 0.8848)
proportion
0.33
0.25
0.17
0.08
0.00
preceded by 5'
followed by 3'

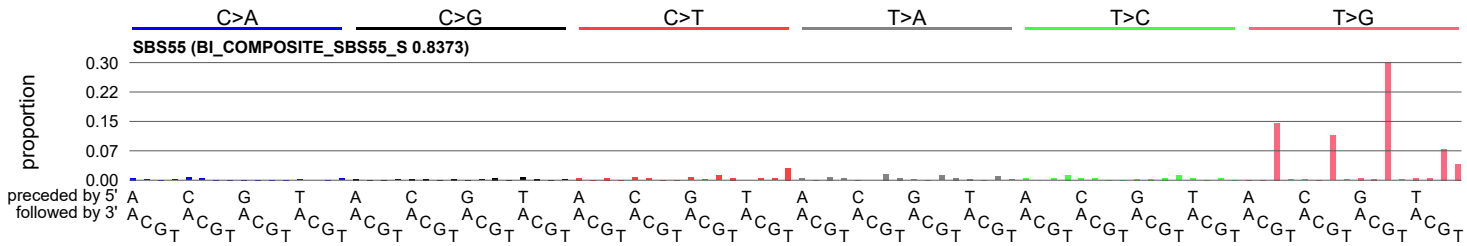

C>A
C>G
C>T
T>A
T>C
T>G
SBS3 (BI_COMPOSITE_SBS39_P 0.8756) (BI_COMPOSITE_SBS3_P 0.8321) (BI_COMPOSITE_SBS82_P 0.7416)
proportion
0.03
0.02
0.01
0.01
0.00
preceded by 5'
followed by 3'

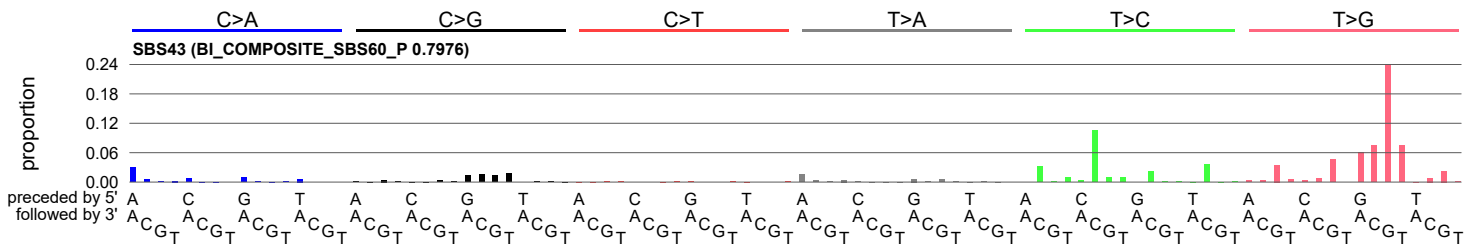

C>A
C>G
C>T
T>A
T>C
T>G
SBS39 (BI_COMPOSITE_SBS39_P 0.9308) (BI_COMPOSITE_SBS83_P 0.1598)
proportion
0.05
0.04
0.03
0.01
0.00
preceded by 5'
followed by 3'

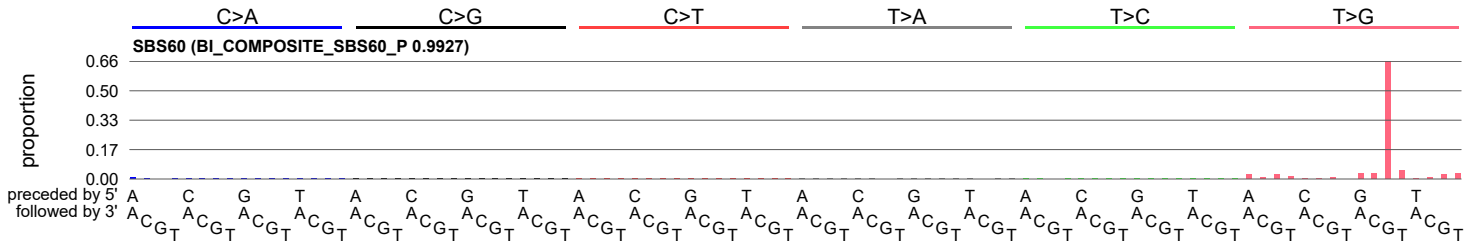

C>A
C>G
C>T
T>A
T>C
T>G
SBS40 (BI_COMPOSITE_SBS40_P 0.8536) (BI_COMPOSITE_SBS70_P 0.7086)
proportion
0.03
0.02
0.02
0.01
0.00
preceded by 5'
followed by 3'

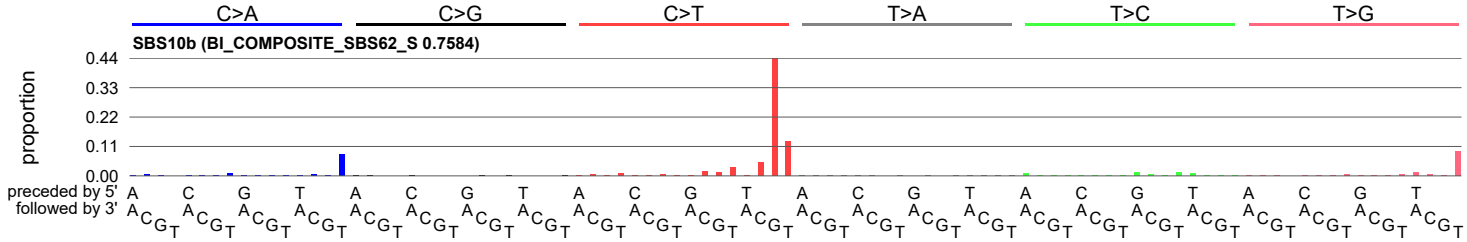

C>A
C>G
C>T
T>A
T>C
T>G
SBS20 (BI_COMPOSITE_SBS44_S 0.8408)
proportion
0.25
0.19
0.13
0.06
0.00
preceded by 5'
followed by 3'

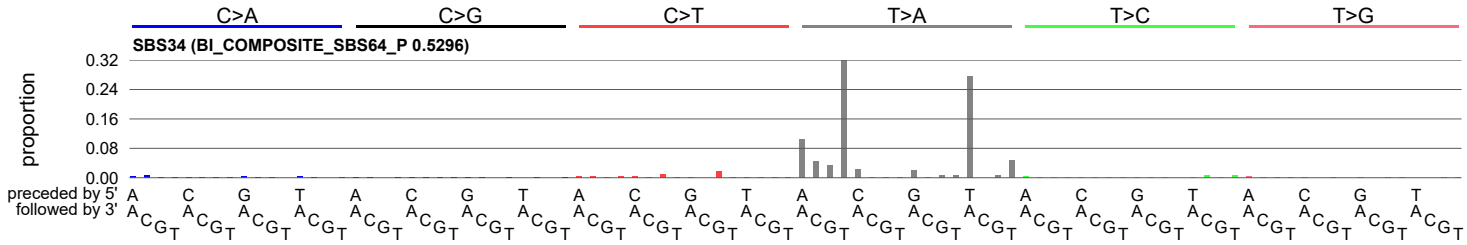

C>A
C>G
C>T
T>A
T>C
T>G
SBS44 (BI_COMPOSITE_SBS44_S 0.9023)
proportion
0.10
0.07
0.05
0.02
0.00
preceded by 5'
followed by 3'

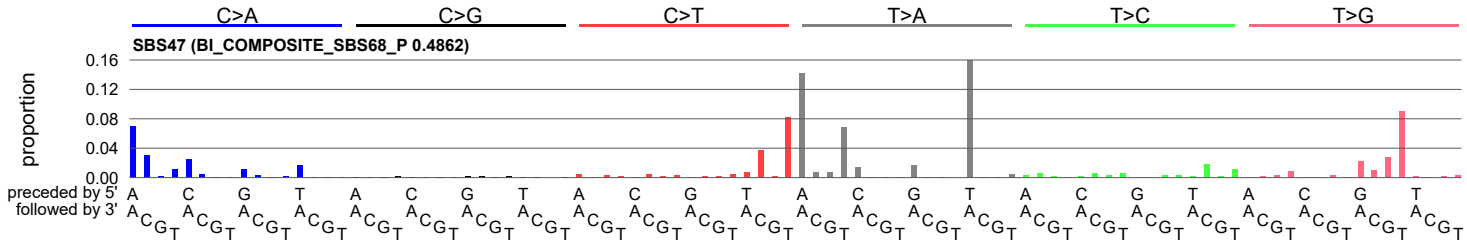

C>A
C>G
C>T
T>A
T>C
T>G
SBS55 (BI_COMPOSITE_SBS55_S 0.8373)
proportion
0.30
0.22
0.15
0.07
0.00
preceded by 5'
followed by 3'

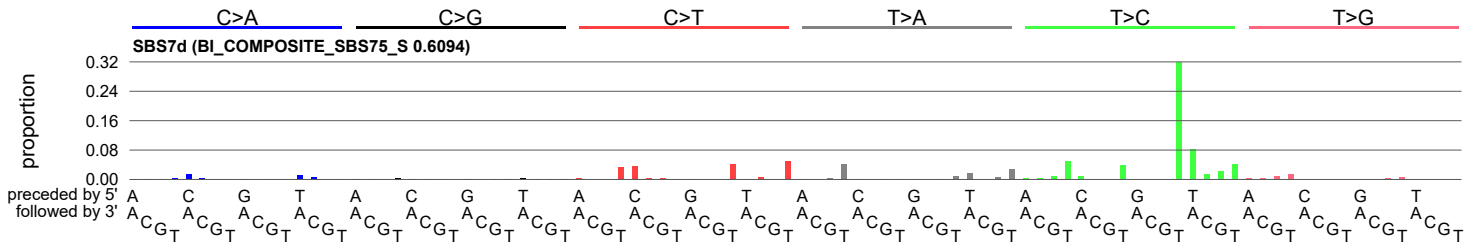

C>A
C>G
C>T
T>A
T>C
T>G
SBS43 (BI_COMPOSITE_SBS60_P 0.7976)
proportion
0.24
0.18
0.12
0.06
0.00
preceded by 5'
followed by 3'

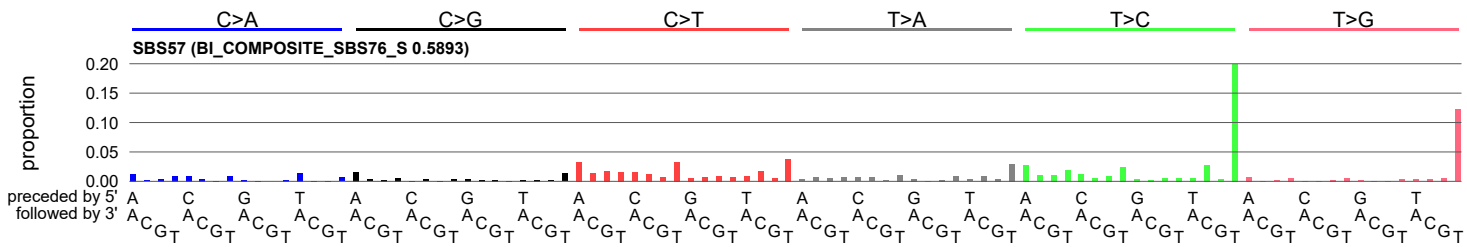

C>A
C>G
C>T
T>A
T>C
T>G
SBS60 (BI_COMPOSITE_SBS60_P 0.9927)
proportion
0.66
0.50
0.33
0.17
0.00
preceded by 5'
followed by 3'

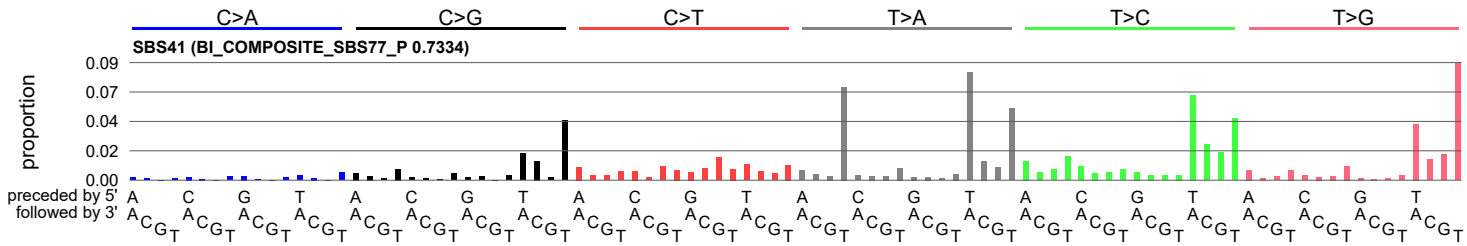

C>A
C>G
C>T
T>A
T>C
T>G
SBS10b (BI_COMPOSITE_SBS62_S 0.7584)
proportion
0.44
0.33
0.22
0.11
0.00
preceded by 5'
followed by 3'

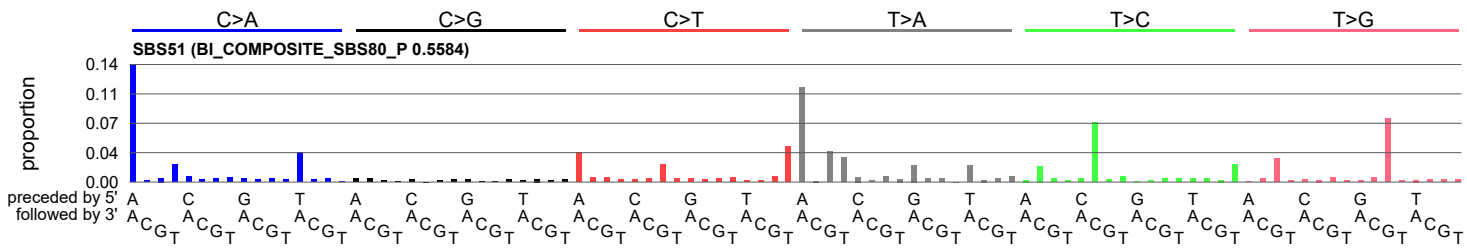

C>A
C>G
C>T
T>A
T>C
T>G
SBS34 (BI_COMPOSITE_SBS64_P 0.5296)
proportion
0.32
0.24
0.16
0.08
0.00
preceded by 5'
followed by 3'

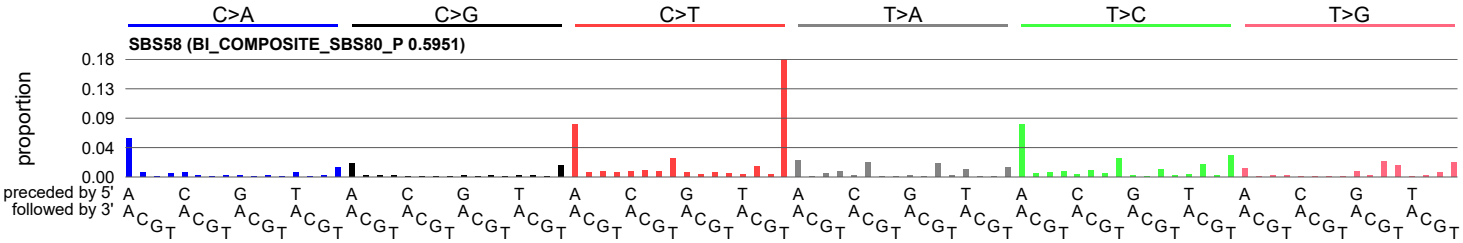

C>A
C>G
C>T
T>A
T>C
T>G
SBS47 (BI_COMPOSITE_SBS68_P 0.4862)
proportion
0.16
0.12
0.08
0.04
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
SBS7d (BI_COMPOSITE_SBS75_S 0.6094)
proportion
0.32
0.24
0.16
0.08
0.00
preceded by 5'
followed by 3'


C>A
C>G
C>T
T>A
T>C
T>G
SBS57 (BI_COMPOSITE_SBS76_S 0.5893)
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
SBS41 (BI_COMPOSITE_SBS77_P 0.7334)
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
SBS51 (BI_COMPOSITE_SBS80_P 0.5584)
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
SBS58 (BI_COMPOSITE_SBS80_P 0.5951)
proportion
0.18
0.13
0.09
0.04
0.00
preceded by 5'
followed by 3'