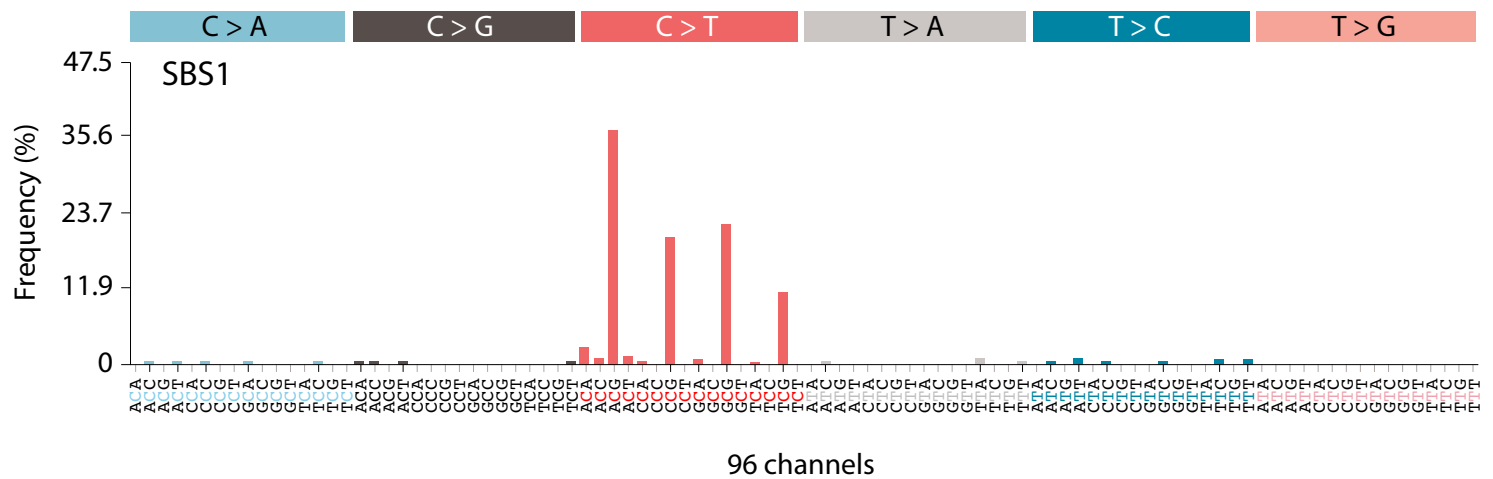

Supplementary information

Mutational signatures: emerging concepts, caveats and clinical applications

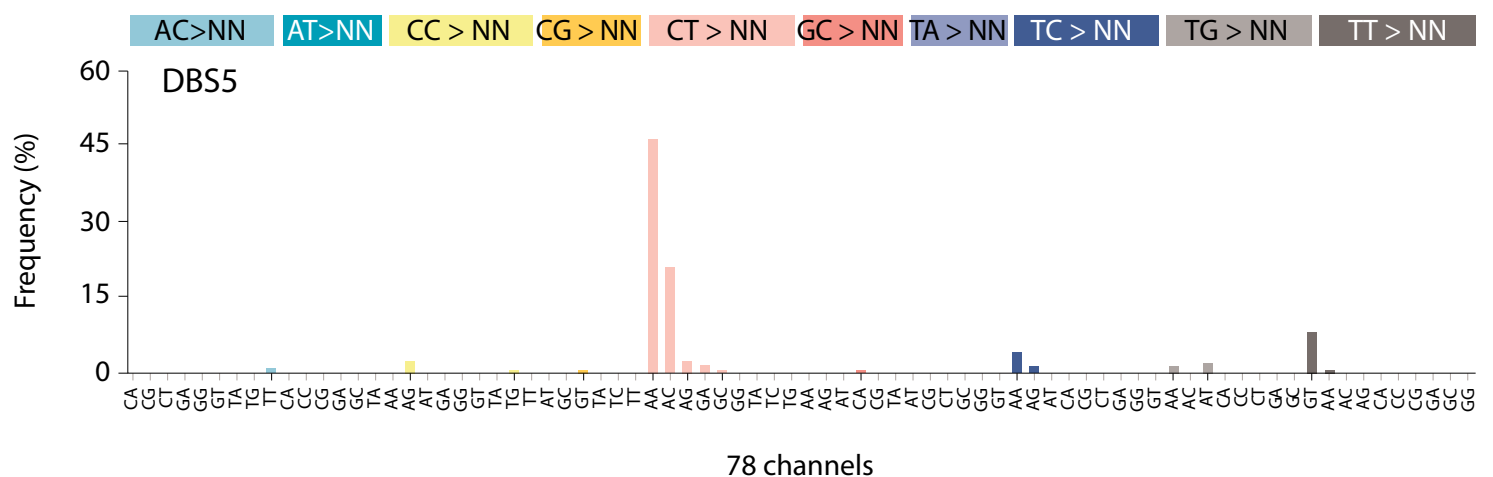
In the format provided by the
authors and unedited

Supplementary Figure

Expanded representation of single base substitution (SBS) signature



Expanded representation of double base substitution (DBS) signature



Supplementary Fig 1 | Expanded representation of signatures. *Top*: Sequence context immediately 5' and 3' to each mutated base is usually considered for single base substitution (SBS) signatures. Since there are 6 classes of base substitution (C>A, C>G, C>T, T>A, T>C, T>G) and 16 possible sequence contexts for each mutated base (5' A, C, G, or T and 3' A, C, G, or T), there are 96 possible channels for substitution signature. *Bottom*: Double substitutions are two adjacent bases that are mutated (*in cis*), indicating the existence of commonly occurring mutagenic events that cause substitution mutation at neighbouring bases. Double substitution (DBS) signatures can be defined by 78 strand-agnostic combinations. Here, the 5' and 3' sequence contexts are not commonly considered because it creates ($4 \times 78 \times 4 = 1,248$) too many channels for the yield of double substitutions typically seen in a sample.