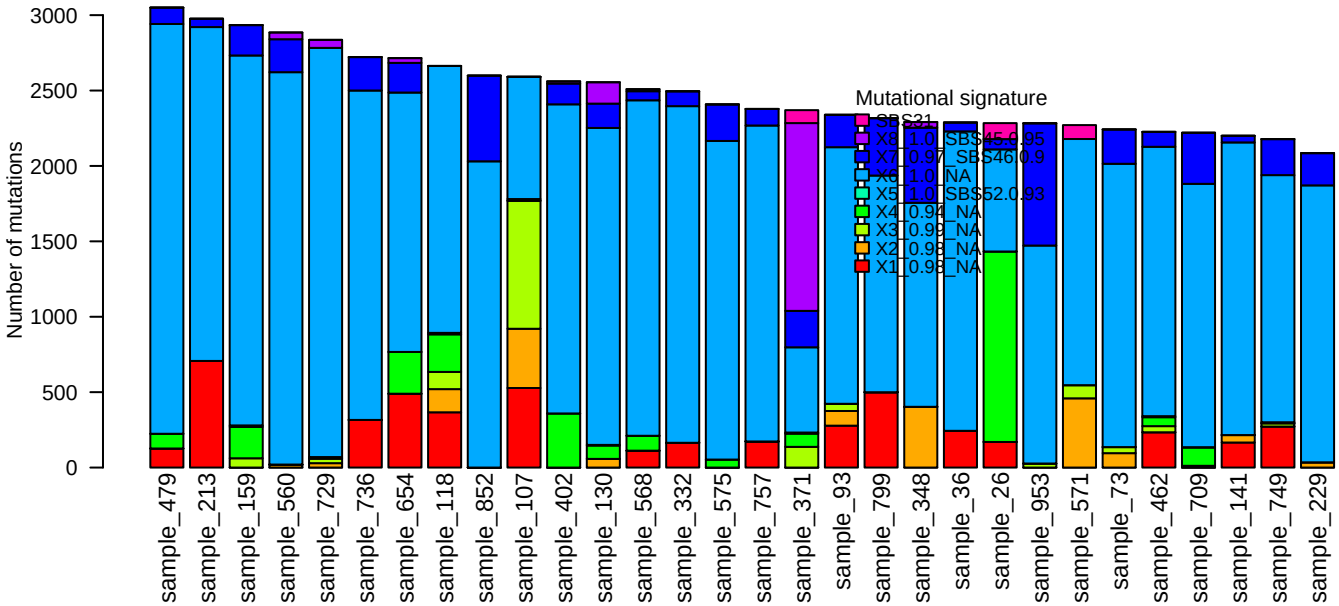
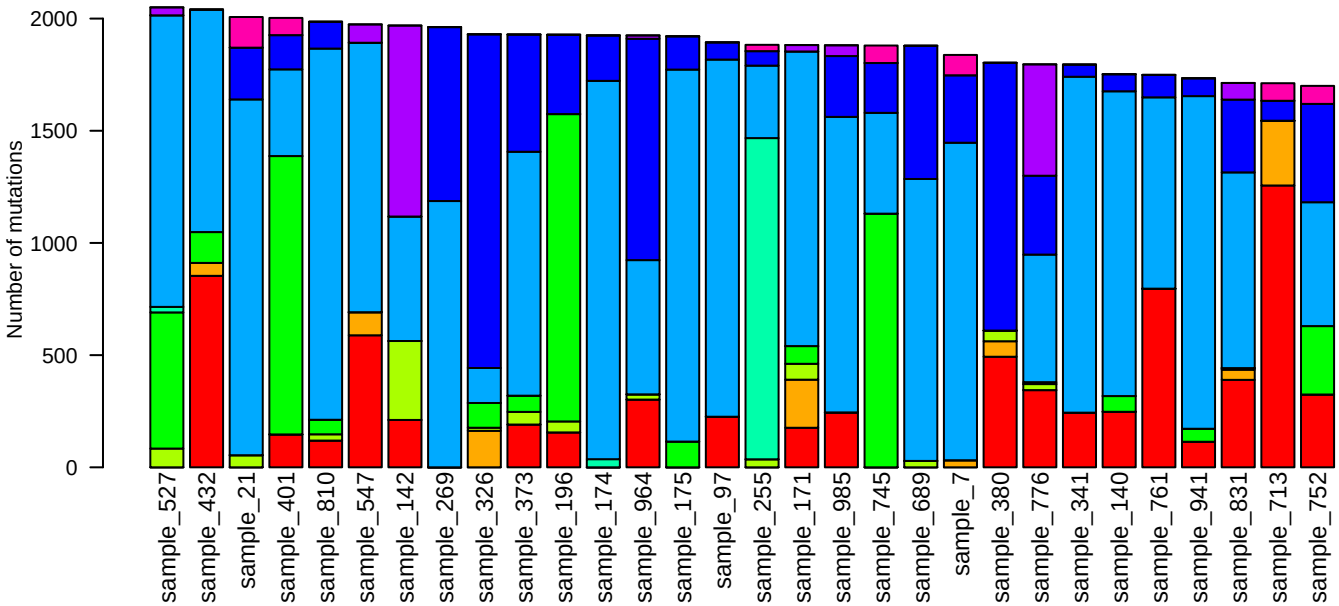
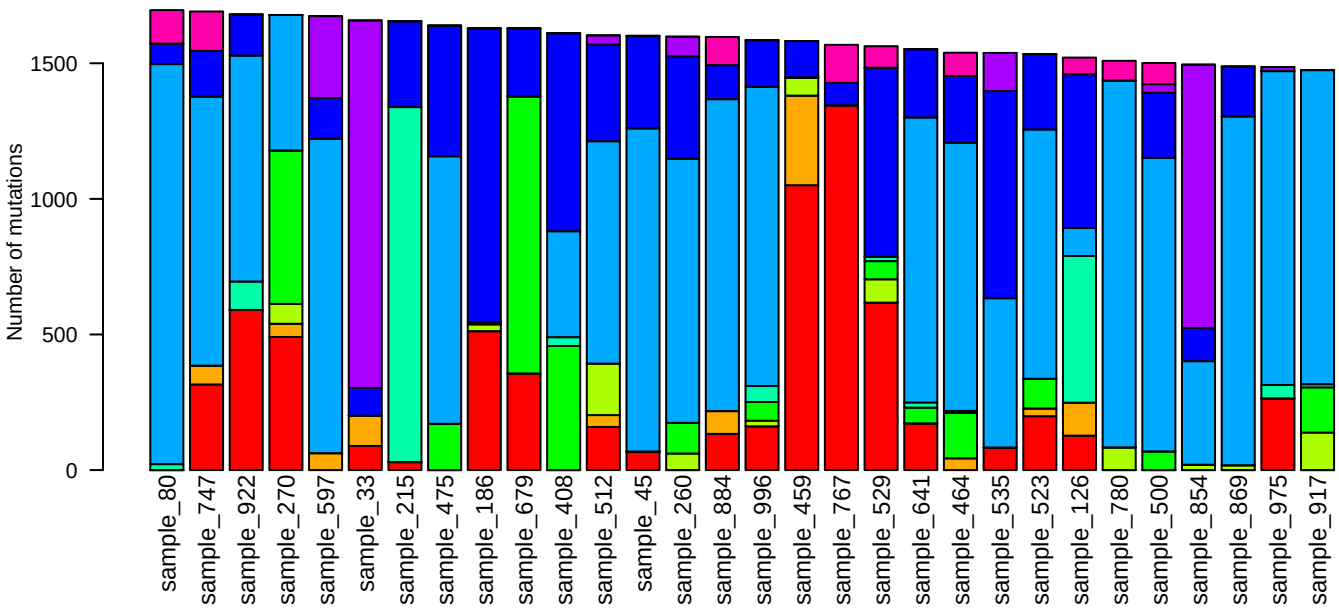
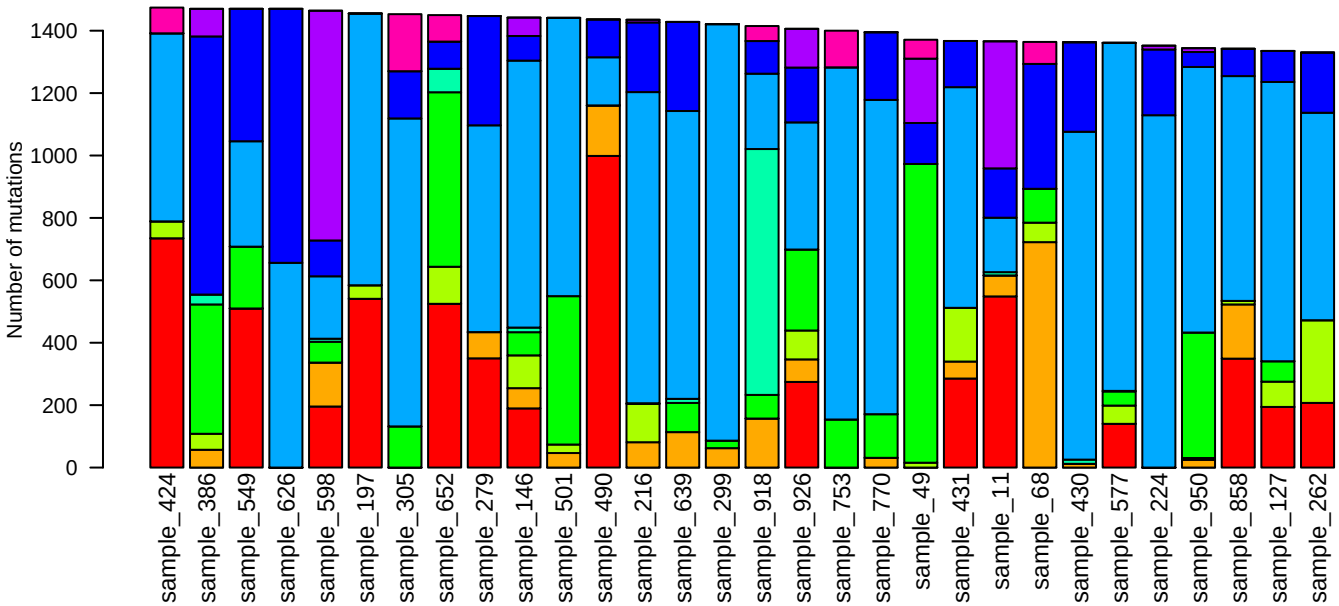

Number of mutations
3000
2500
2000
1500
1000
500
0
Mutational signature
SBS31
X8_1.0_SBS45.0.95
X7_0.97_SBS46.0.9
X6_1.0_NA
X5_1.0_SBS52.0.93
X4_0.94_NA
X3_0.99_NA
X2_0.98_NA
X1_0.98_NA
sample_479
sample_213
sample_159
sample_560
sample_729
sample_736
sample_654
sample_118
sample_852
sample_107
sample_402
sample_130
sample_568
sample_332
sample_575
sample_757
sample_371
sample_93
sample_799
sample_348
sample_36
sample_26
sample_953
sample_571
sample_73
sample_462
sample_709
sample_141
sample_749
sample_229


Number of mutations
2000
1500
1000
500
0
sample_527
sample_432
sample_21
sample_401
sample_810
sample_547
sample_142
sample_269
sample_326
sample_373
sample_196
sample_174
sample_964
sample_175
sample_97
sample_255
sample_171
sample_985
sample_745
sample_689
sample_7
sample_380
sample_776
sample_341
sample_140
sample_761
sample_941
sample_831
sample_713
sample_752


Number of mutations
1500
1000
500
0
sample_80
sample_747
sample_922
sample_270
sample_597
sample_33
sample_215
sample_475
sample_186
sample_679
sample_408
sample_512
sample_45
sample_260
sample_884
sample_996
sample_459
sample_767
sample_529
sample_641
sample_464
sample_535
sample_523
sample_126
sample_780
sample_500
sample_854
sample_869
sample_975
sample_917


Number of mutations
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200
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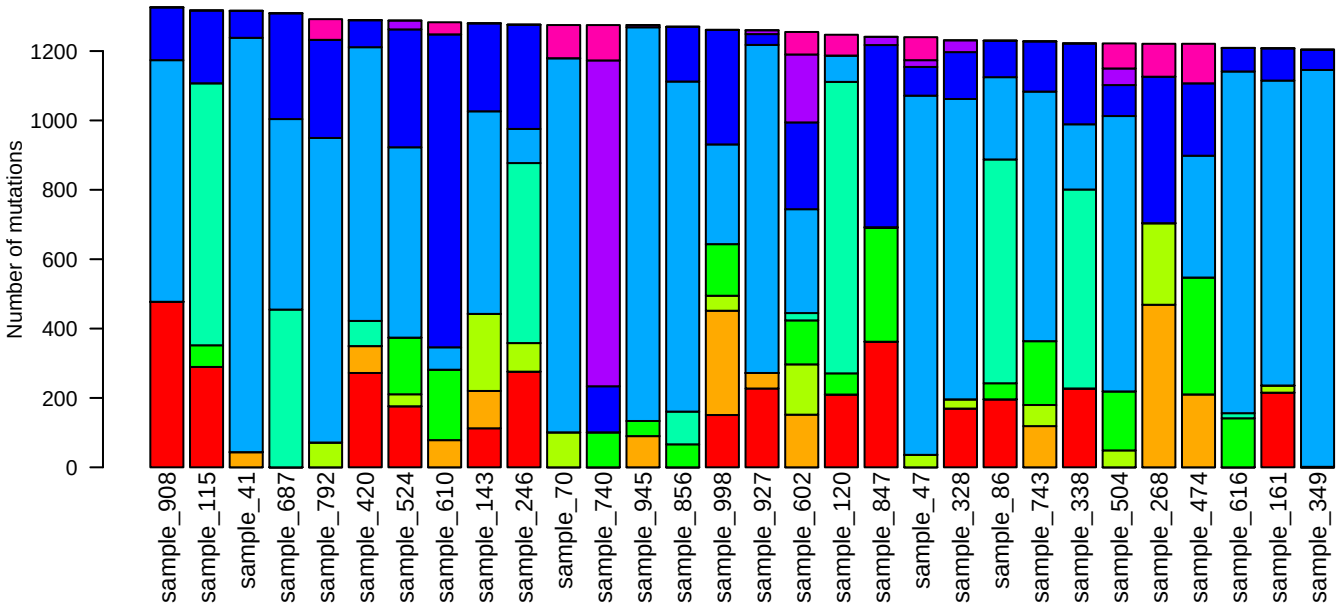
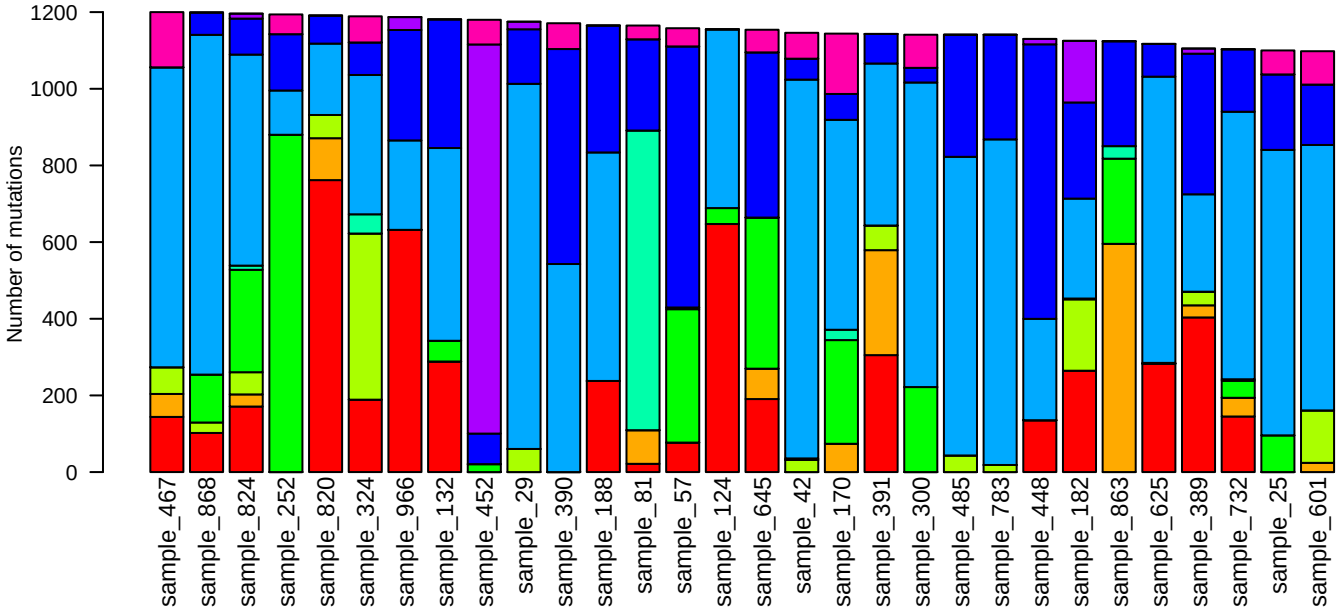
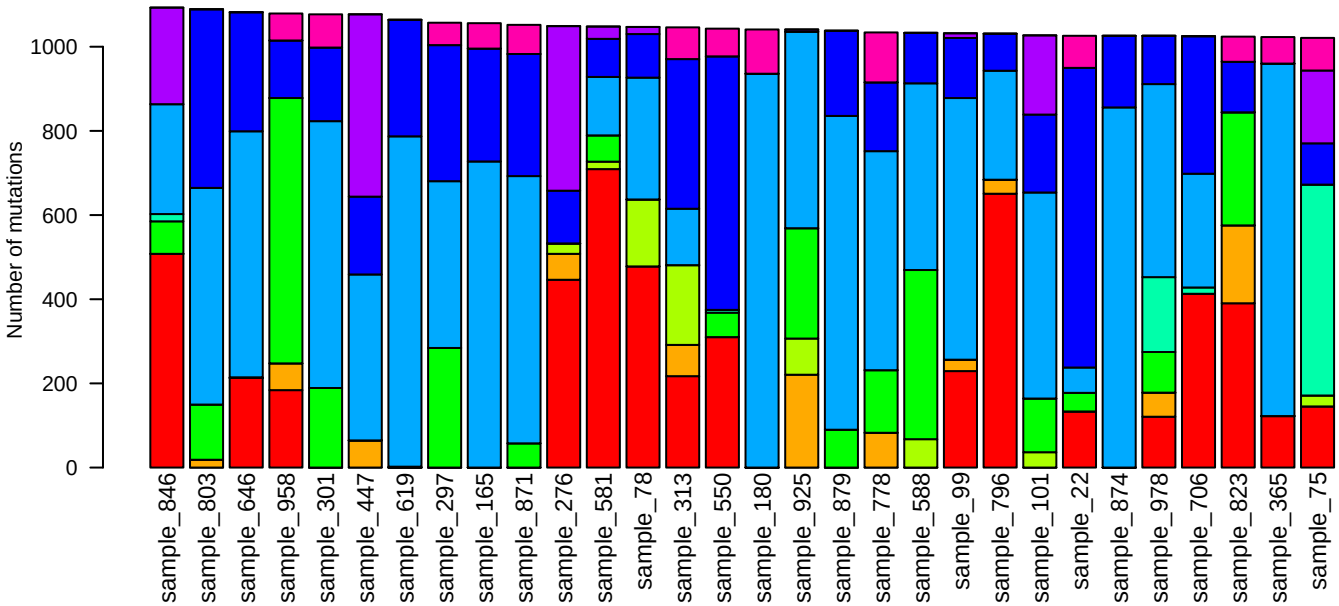
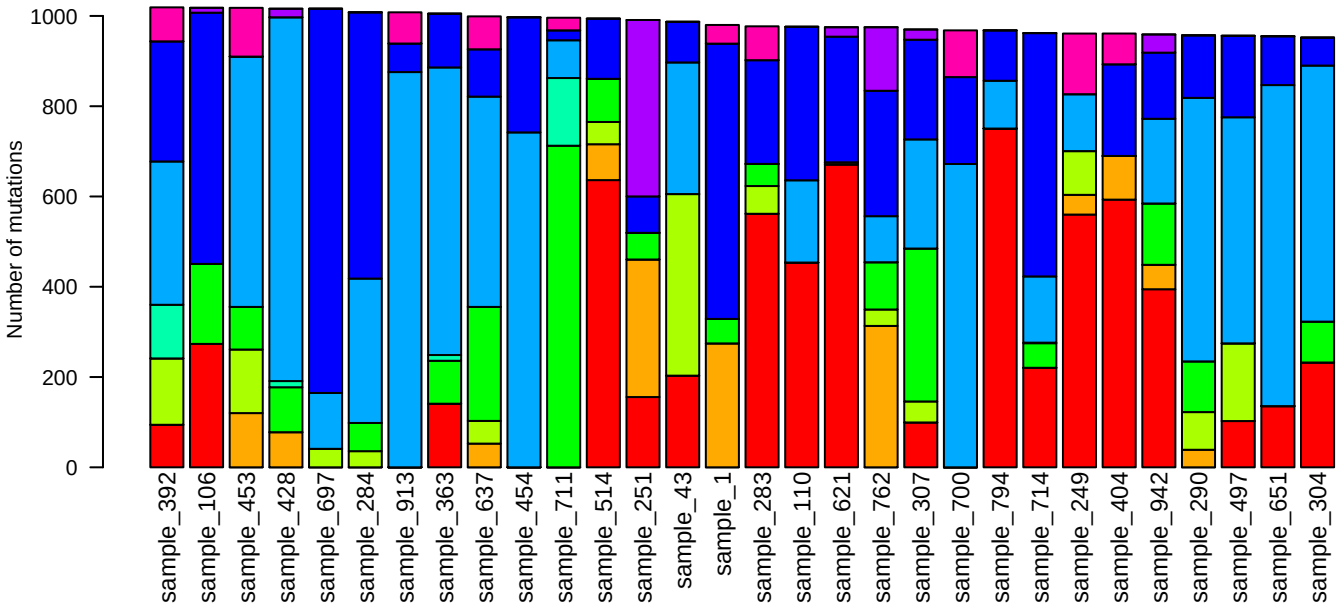
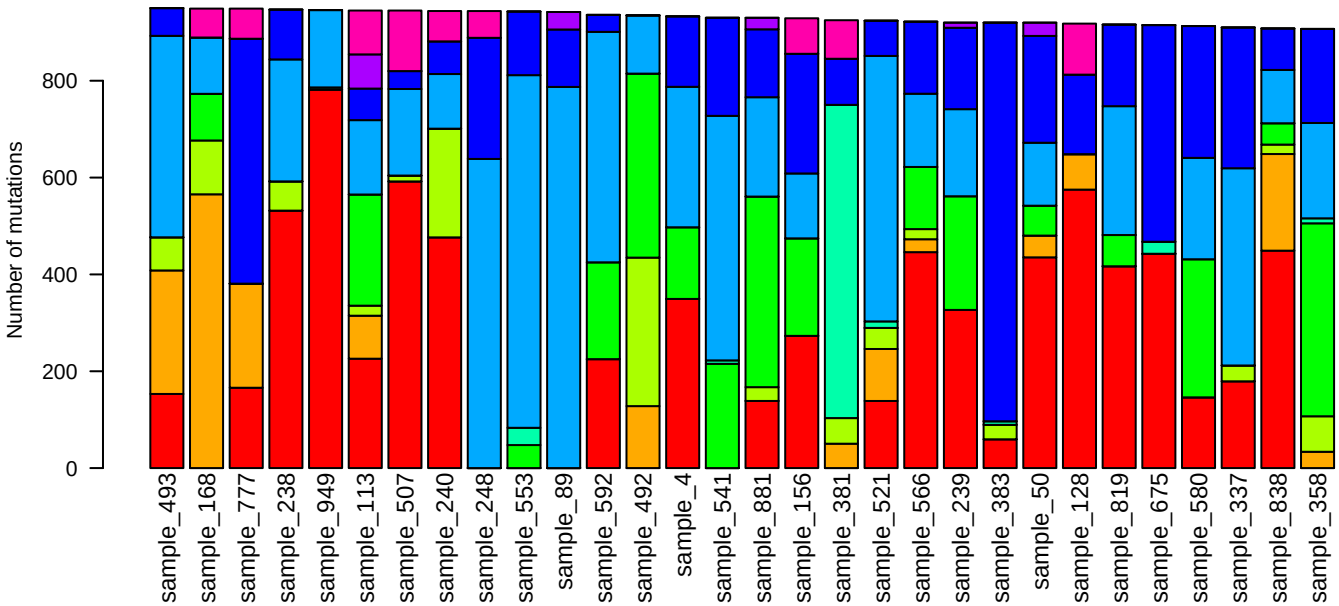
600
800
1000
1200
1400
sample_424
sample_386
sample_549
sample_626
sample_598
sample_197
sample_305
sample_652
sample_279
sample_146
sample_501
sample_490
sample_216
sample_639
sample_299
sample_918
sample_926
sample_753
sample_770
sample_49
sample_431
sample_11
sample_68
sample_430
sample_577
sample_224
sample_950
sample_858
sample_127
sample_262

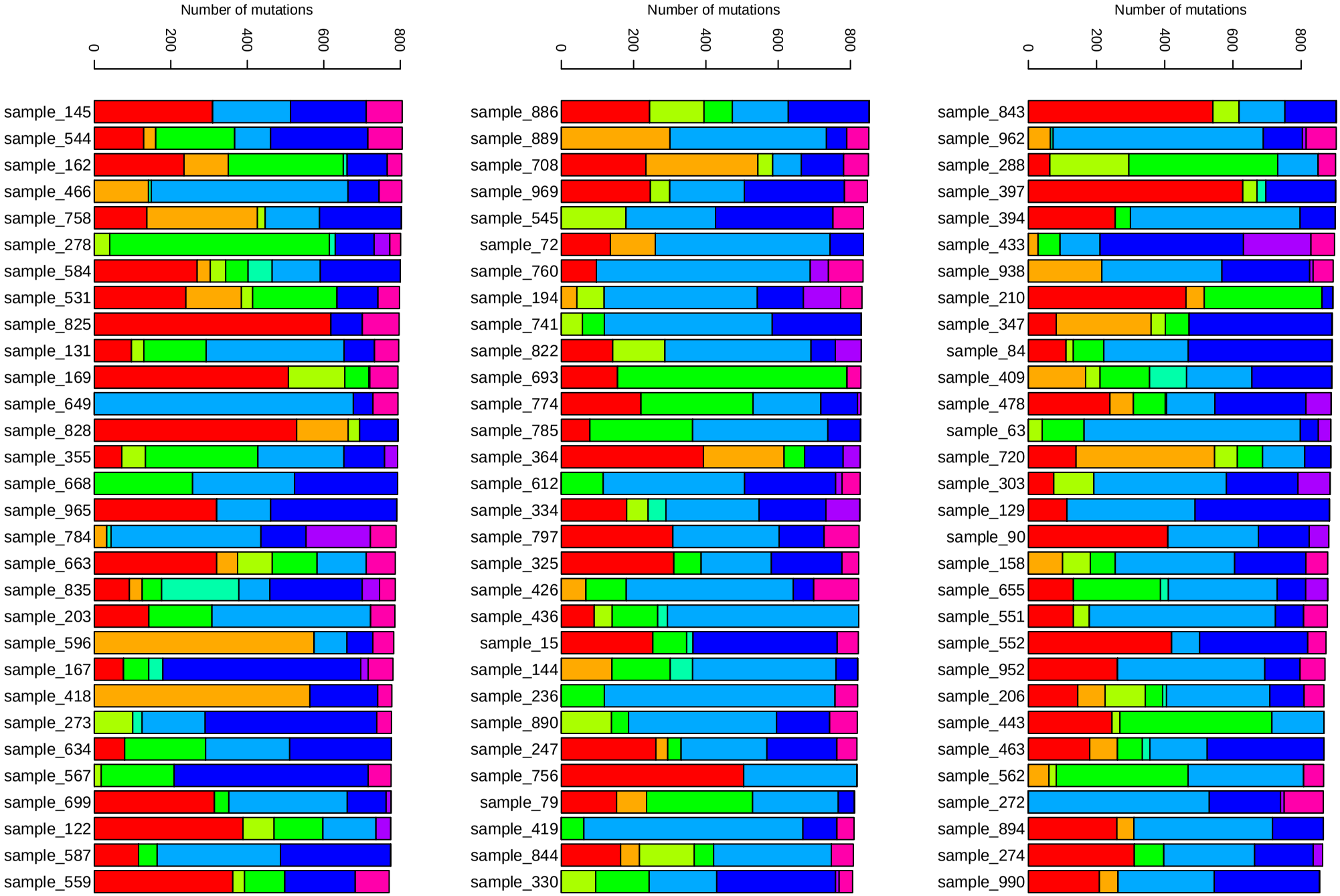

Number of mutations
0
200
400
600
800
1000
1200
sample_908
sample_115
sample_41
sample_687
sample_792
sample_420
sample_524
sample_610
sample_143
sample_246
sample_70
sample_740
sample_945
sample_856
sample_998
sample_927
sample_602
sample_120
sample_847
sample_47
sample_328
sample_86
sample_743
sample_338
sample_504
sample_268
sample_474
sample_616
sample_161
sample_349

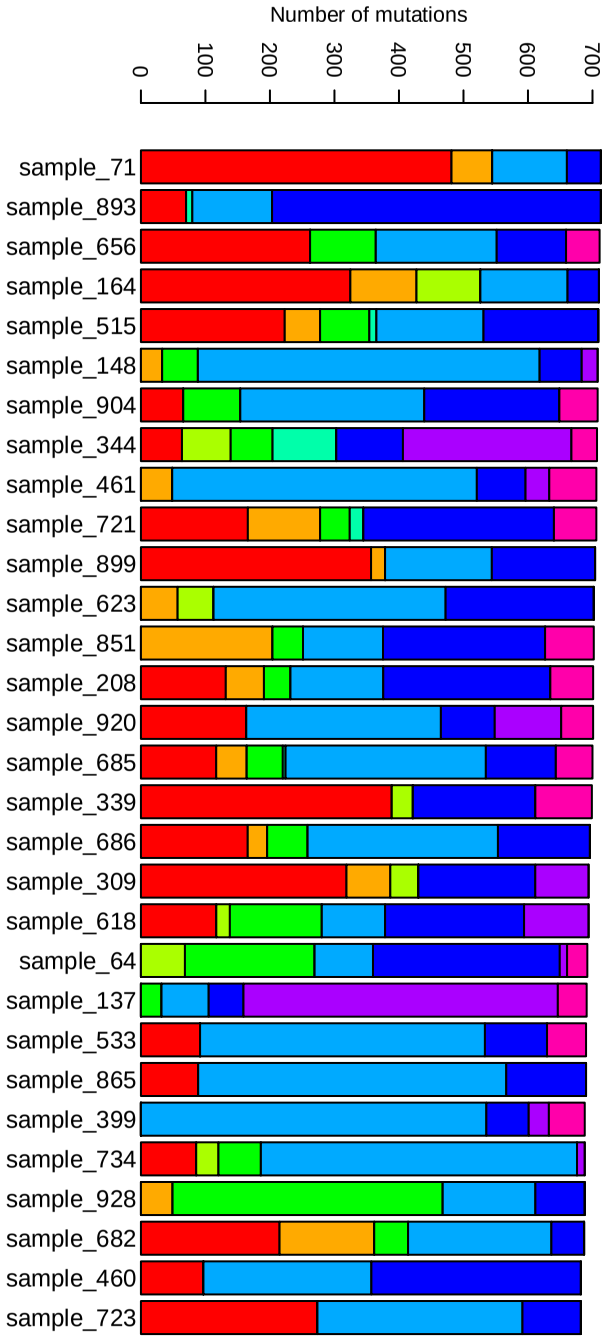

Number of mutations
0
200
400
600
800
1000
1200
sample_467
sample_868
sample_824
sample_252
sample_820
sample_324
sample_966
sample_132
sample_452
sample_29
sample_390
sample_188
sample_81
sample_57
sample_124
sample_645
sample_42
sample_170
sample_391
sample_300
sample_485
sample_783
sample_448
sample_182
sample_863
sample_625
sample_389
sample_732
sample_25
sample_601

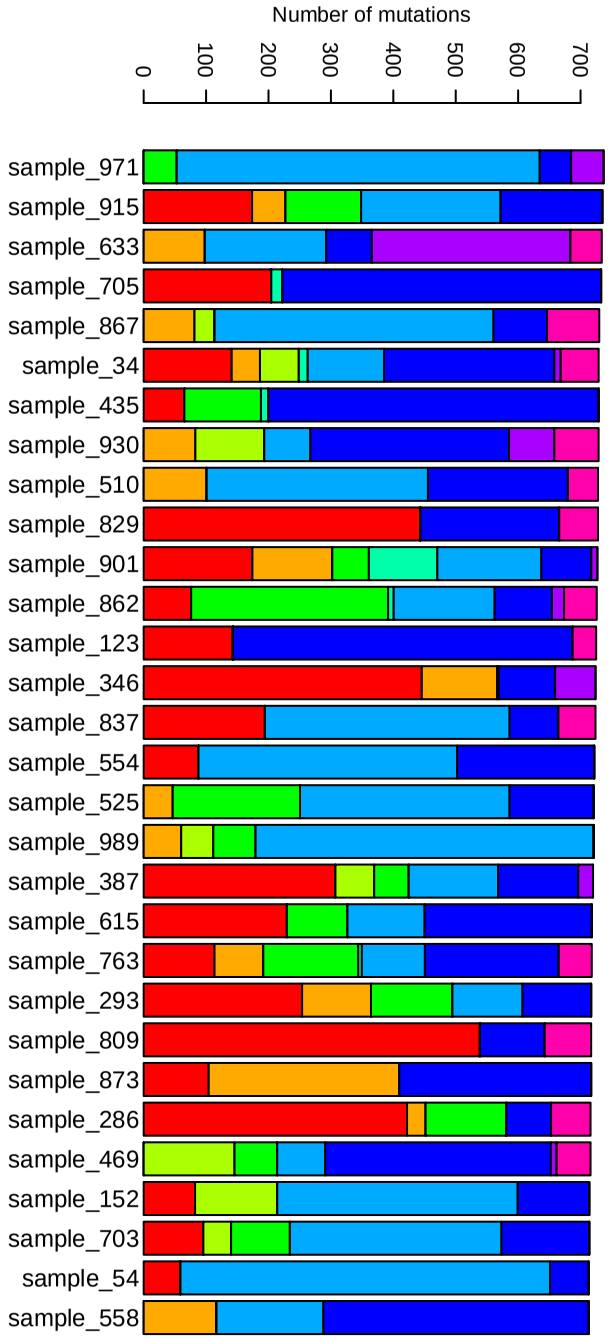

Number of mutations
0
200
400
600
800
1000
sample_846
sample_803
sample_646
sample_958
sample_301
sample_447
sample_619
sample_297
sample_165
sample_871
sample_276
sample_581
sample_78
sample_313
sample_550
sample_180
sample_925
sample_879
sample_778
sample_588
sample_99
sample_796
sample_101
sample_22
sample_874
sample_978
sample_706
sample_823
sample_365
sample_75


Number of mutations
0
200
400
600
800
1000
sample_392
sample_106
sample_453
sample_428
sample_697
sample_284
sample_913
sample_363
sample_637
sample_454
sample_711
sample_514
sample_251
sample_43
sample_1
sample_283
sample_110
sample_621
sample_762
sample_307
sample_700
sample_794
sample_714
sample_249
sample_404
sample_942
sample_290
sample_497
sample_651
sample_304


Number of mutations
0
200
400
600
800
sample_493
sample_168
sample_777
sample_238
sample_949
sample_113
sample_507
sample_240
sample_248
sample_553
sample_89
sample_592
sample_492
sample_4
sample_541
sample_881
sample_156
sample_381
sample_521
sample_566
sample_239
sample_383
sample_50
sample_128
sample_819
sample_675
sample_580
sample_337
sample_838
sample_358


Number of mutations
0
200
400
600
800
sample_145
sample_544
sample_162
sample_466
sample_758
sample_278
sample_584
sample_531
sample_825
sample_131
sample_169
sample_649
sample_828
sample_355
sample_668
sample_965
sample_784
sample_663
sample_835
sample_203
sample_596
sample_167
sample_418
sample_273
sample_634
sample_567
sample_699
sample_122
sample_587
sample_559
sample_886
sample_889
sample_708
sample_969
sample_545
sample_72
sample_760
sample_194
sample_741
sample_822
sample_693
sample_774
sample_785
sample_364
sample_612
sample_334
sample_797
sample_325
sample_426
sample_436
sample_15
sample_144
sample_236
sample_890
sample_247
sample_756
sample_79
sample_419
sample_844
sample_330
sample_843
sample_962
sample_288
sample_397
sample_394
sample_433
sample_938
sample_210
sample_347
sample_84
sample_409
sample_478
sample_63
sample_720
sample_303
sample_129
sample_90
sample_158
sample_655
sample_551
sample_552
sample_952
sample_206
sample_443
sample_463
sample_562
sample_272
sample_894
sample_274
sample_990


Number of mutations
0
100
200
300
400
500
600
700
sample_71
sample_893
sample_656
sample_164
sample_515
sample_148
sample_904
sample_344
sample_461
sample_721
sample_899
sample_623
sample_851
sample_208
sample_920
sample_685
sample_339
sample_686
sample_309
sample_618
sample_64
sample_137
sample_533
sample_865
sample_399
sample_734
sample_928
sample_682
sample_460
sample_723


Number of mutations
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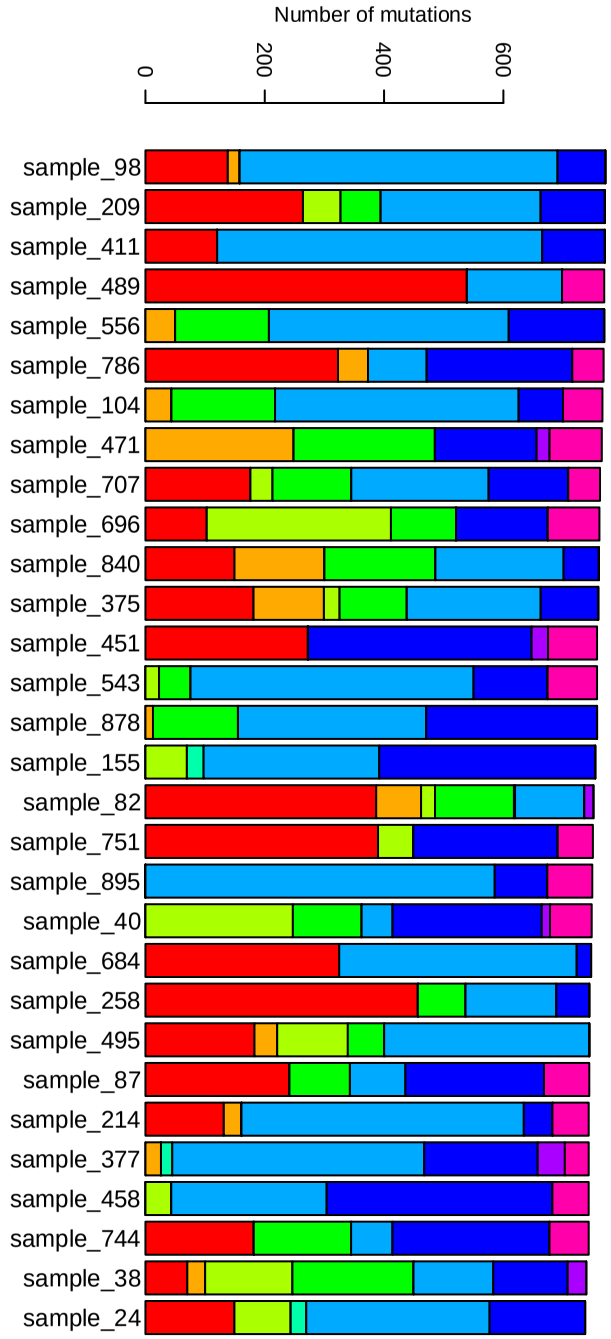
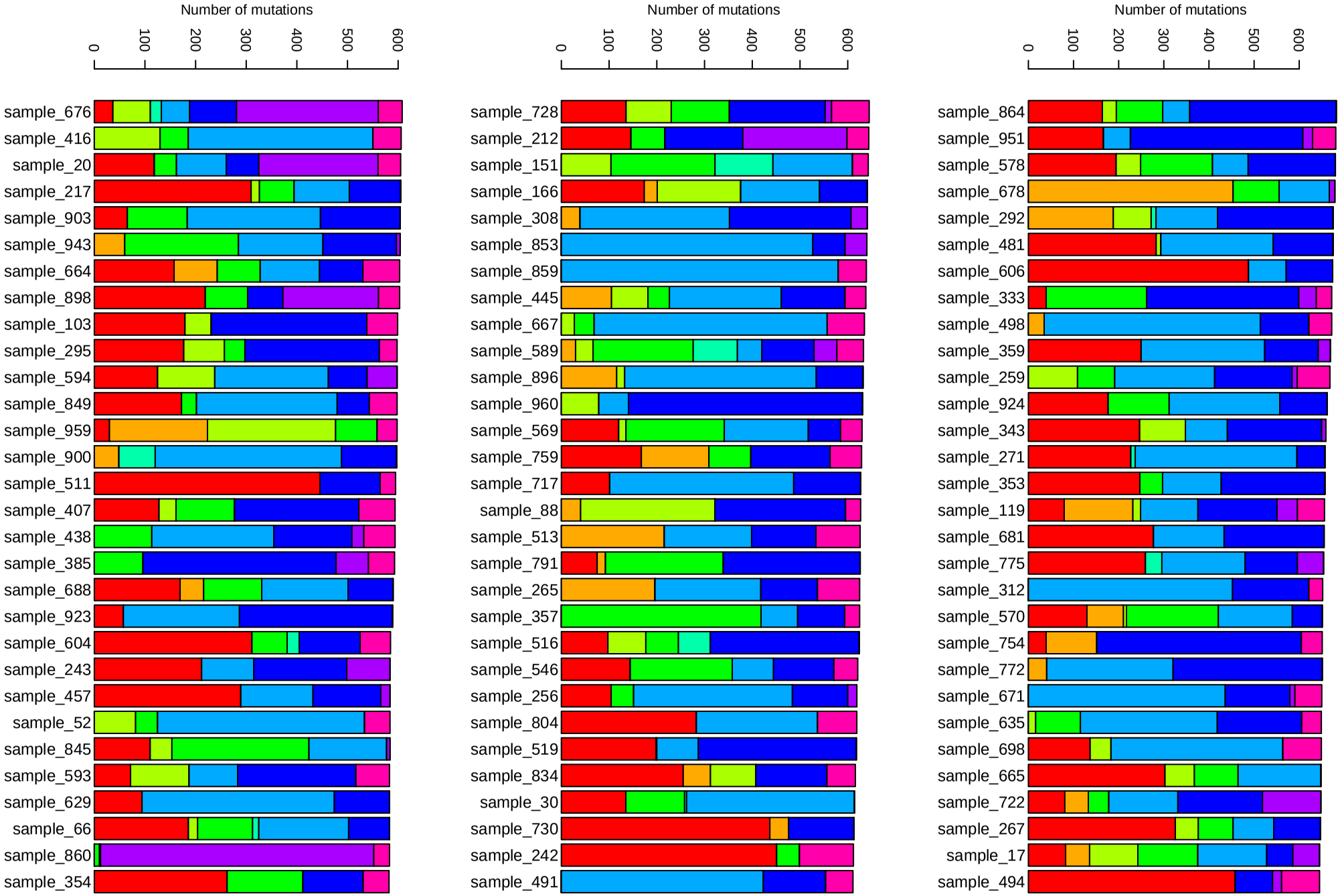
100
200
300
400
500
600
700
sample_971
sample_915
sample_633
sample_705
sample_867
sample_34
sample_435
sample_930
sample_510
sample_829
sample_901
sample_862
sample_123
sample_346
sample_837
sample_554
sample_525
sample_989
sample_387
sample_615
sample_763
sample_293
sample_809
sample_873
sample_286
sample_469
sample_152
sample_703
sample_54
sample_558


Number of mutations
0
200
400
600
sample_98
sample_209
sample_411
sample_489
sample_556
sample_786
sample_104
sample_471
sample_707
sample_696
sample_840
sample_375
sample_451
sample_543
sample_878
sample_155
sample_82
sample_751
sample_895
sample_40
sample_684
sample_258
sample_495
sample_87
sample_214
sample_377
sample_458
sample_744
sample_38
sample_24


Number of mutations
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300
400
500
600
sample_676
sample_416
sample_20
sample_217
sample_903
sample_943
sample_664
sample_898
sample_103
sample_295
sample_594
sample_849
sample_959
sample_900
sample_511
sample_407
sample_438
sample_385
sample_688
sample_923
sample_604
sample_243
sample_457
sample_52
sample_845
sample_593
sample_629
sample_66
sample_860
sample_354
Number of mutations
0
100
200
300
400
500
600
sample_728
sample_212
sample_151
sample_166
sample_308
sample_853
sample_859
sample_445
sample_667
sample_589
sample_896
sample_960
sample_569
sample_759
sample_717
sample_88
sample_513
sample_791
sample_265
sample_357
sample_516
sample_546
sample_256
sample_804
sample_519
sample_834
sample_30
sample_730
sample_242
sample_491
Number of mutations
0
100
200
300
400
500
600
sample_864
sample_951
sample_578
sample_678
sample_292
sample_481
sample_606
sample_333
sample_498
sample_359
sample_259
sample_924
sample_343
sample_271
sample_353
sample_119
sample_681
sample_775
sample_312
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sample_754
sample_772
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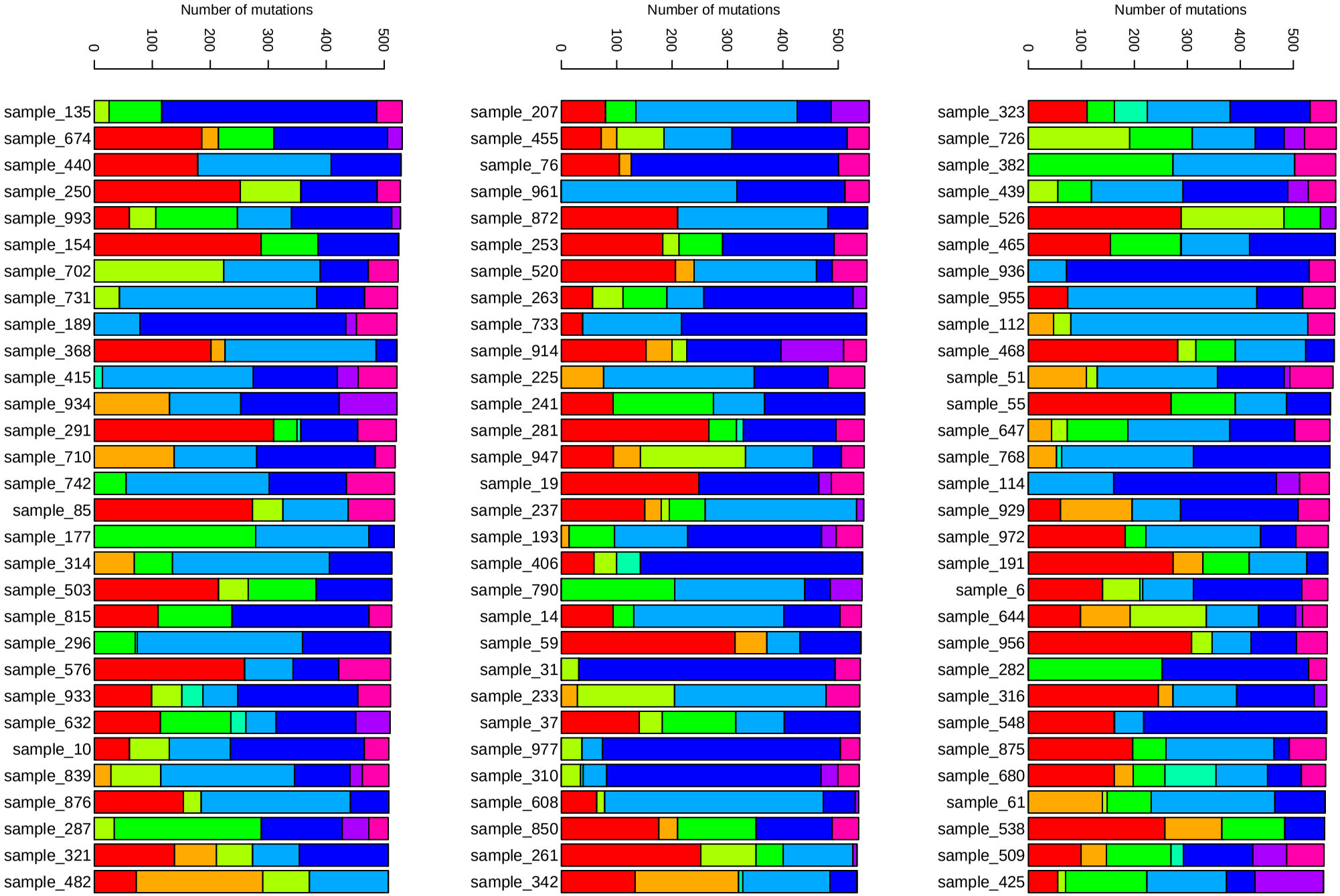
sample_635
sample_698
sample_665
sample_722
sample_267
sample_17
sample_494


Number of mutations
0
100
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300
400
500
sample_135
sample_674
sample_440
sample_250
sample_993
sample_154
sample_702
sample_731
sample_189
sample_368
sample_415
sample_934
sample_291
sample_710
sample_742
sample_85
sample_177
sample_314
sample_503
sample_815
sample_296
sample_576
sample_933
sample_632
sample_10
sample_839
sample_876
sample_287
sample_321
sample_482
Number of mutations
0
100
200
300
400
500
sample_207
sample_455
sample_76
sample_961
sample_872
sample_253
sample_520
sample_263
sample_733
sample_914
sample_225
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sample_281
sample_947
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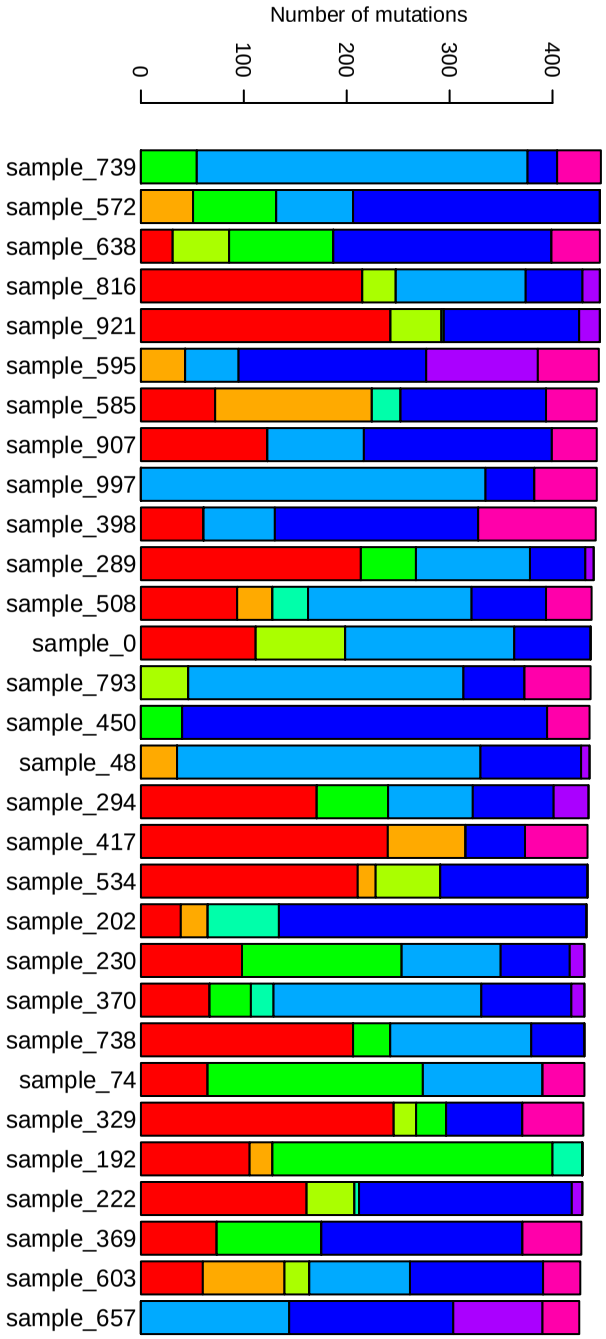
sample_237
sample_193
sample_406
sample_790
sample_14
sample_59
sample_31
sample_233
sample_37
sample_977
sample_310
sample_608
sample_850
sample_261
sample_342
Number of mutations
0
100
200
300
400
500
sample_323
sample_726
sample_382
sample_439
sample_526
sample_465
sample_936
sample_955
sample_112
sample_468
sample_51
sample_55
sample_647
sample_768
sample_114
sample_929
sample_972
sample_191
sample_6
sample_644
sample_956
sample_282
sample_316
sample_548
sample_875
sample_680
sample_61
sample_538
sample_509
sample_425


Number of mutations
0
100
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300
400
sample_739
sample_572
sample_638
sample_816
sample_921
sample_595
sample_585
sample_907
sample_997
sample_398
sample_289
sample_508
sample_0
sample_793
sample_450
sample_48
sample_294
sample_417
sample_534
sample_202
sample_230
sample_370
sample_738
sample_74
sample_329
sample_192
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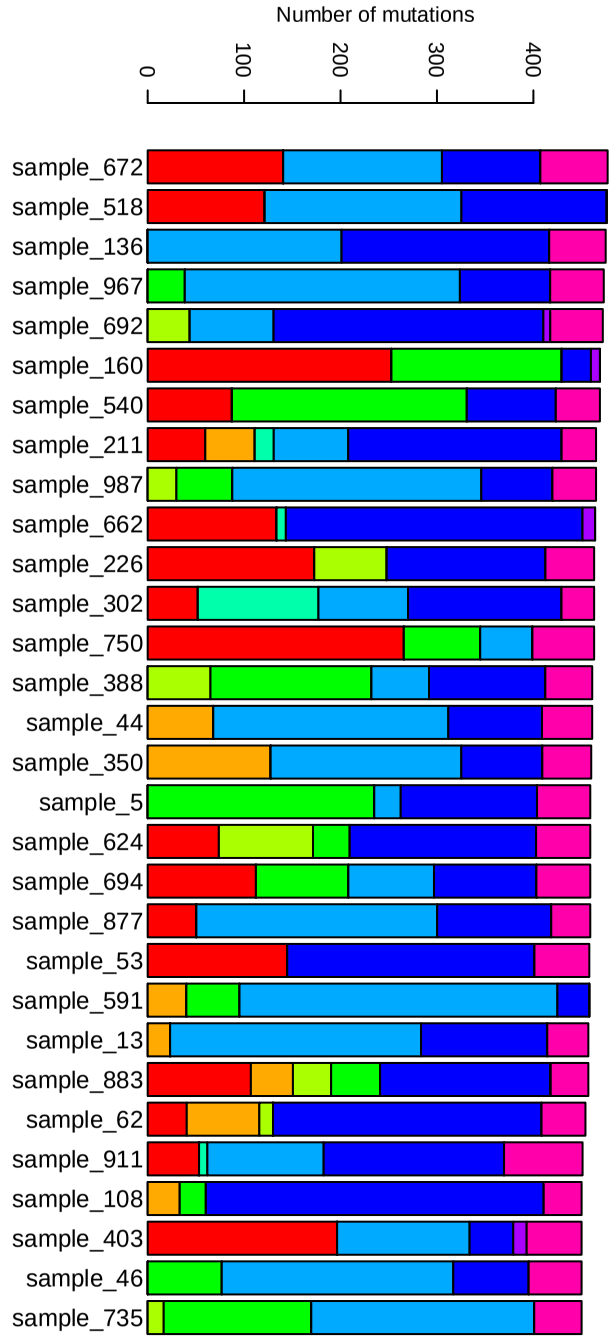
sample_369
sample_603
sample_657


Number of mutations
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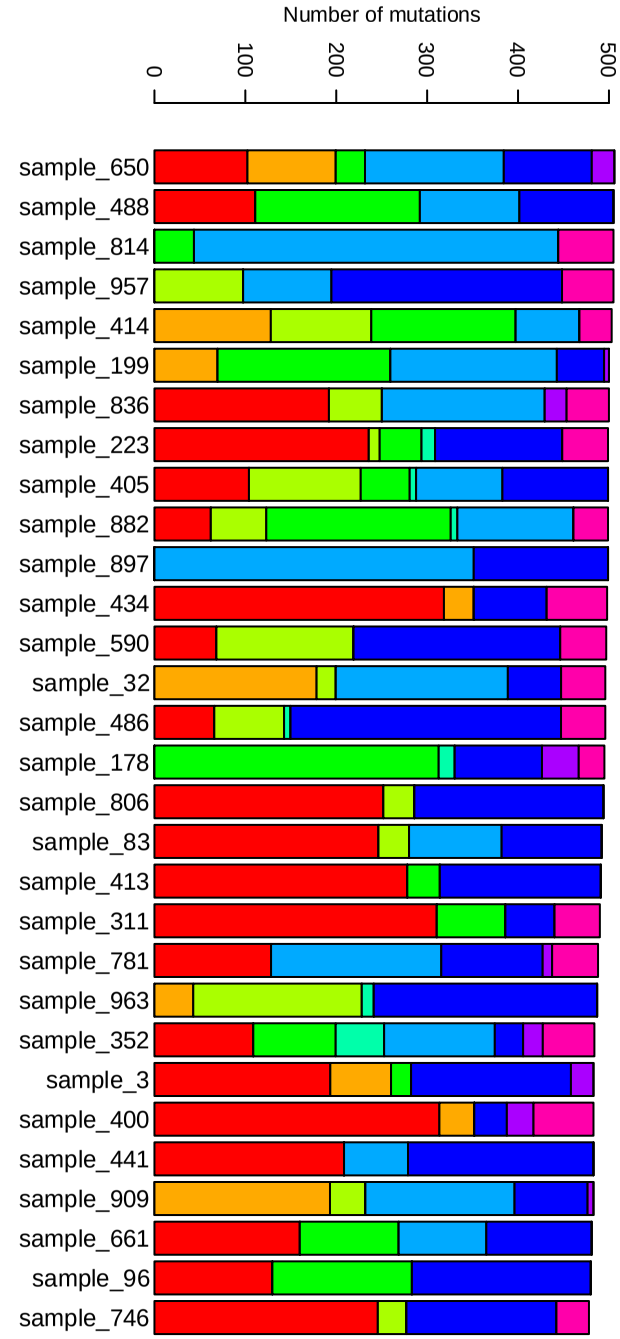
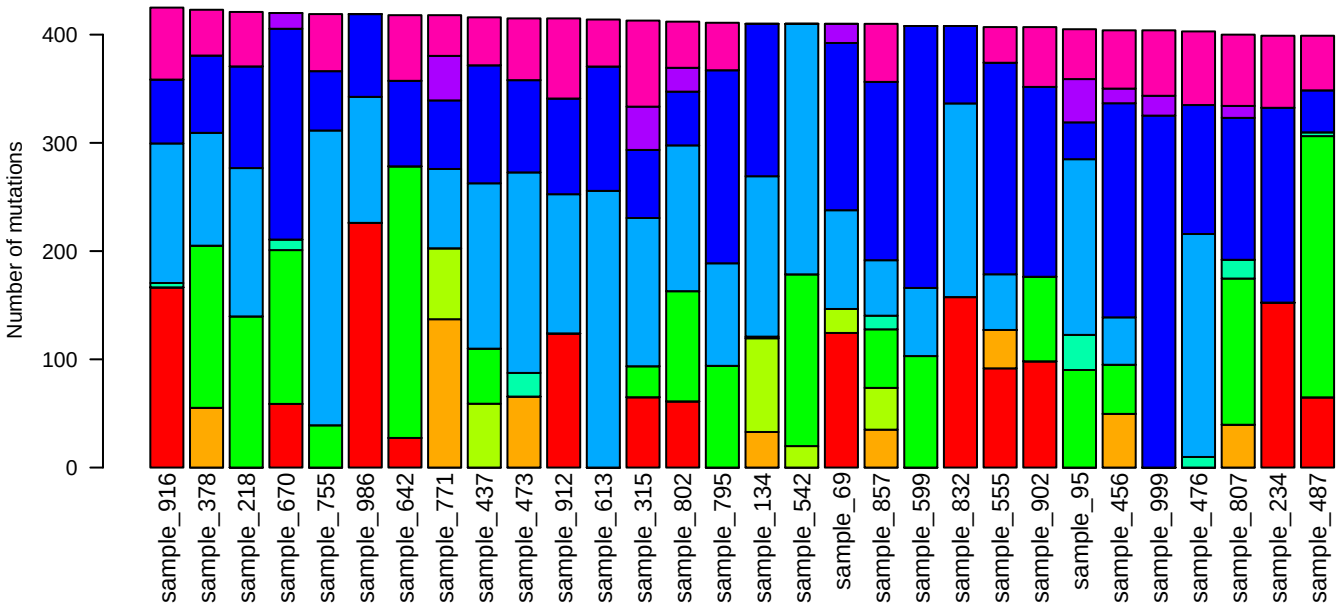
200
300
400
sample_672
sample_518
sample_136
sample_967
sample_692
sample_160
sample_540
sample_211
sample_987
sample_662
sample_226
sample_302
sample_750
sample_388
sample_44
sample_350
sample_5
sample_624
sample_694
sample_877
sample_53
sample_591
sample_13
sample_883
sample_62
sample_911
sample_108
sample_403
sample_46
sample_735


Number of mutations
0
100
200
300
400
500
sample_650
sample_488
sample_814
sample_957
sample_414
sample_199
sample_836
sample_223
sample_405
sample_882
sample_897
sample_434
sample_590
sample_32
sample_486
sample_178
sample_806
sample_83
sample_413
sample_311
sample_781
sample_963
sample_352
sample_3
sample_400
sample_441
sample_909
sample_661
sample_96
sample_746


Number of mutations
0
100
200
300
400
sample_916
sample_378
sample_218
sample_670
sample_755
sample_986
sample_642
sample_771
sample_437
sample_473
sample_912
sample_613
sample_315
sample_802
sample_795
sample_134
sample_542
sample_69
sample_857
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sample_555
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sample_95
sample_456
sample_999
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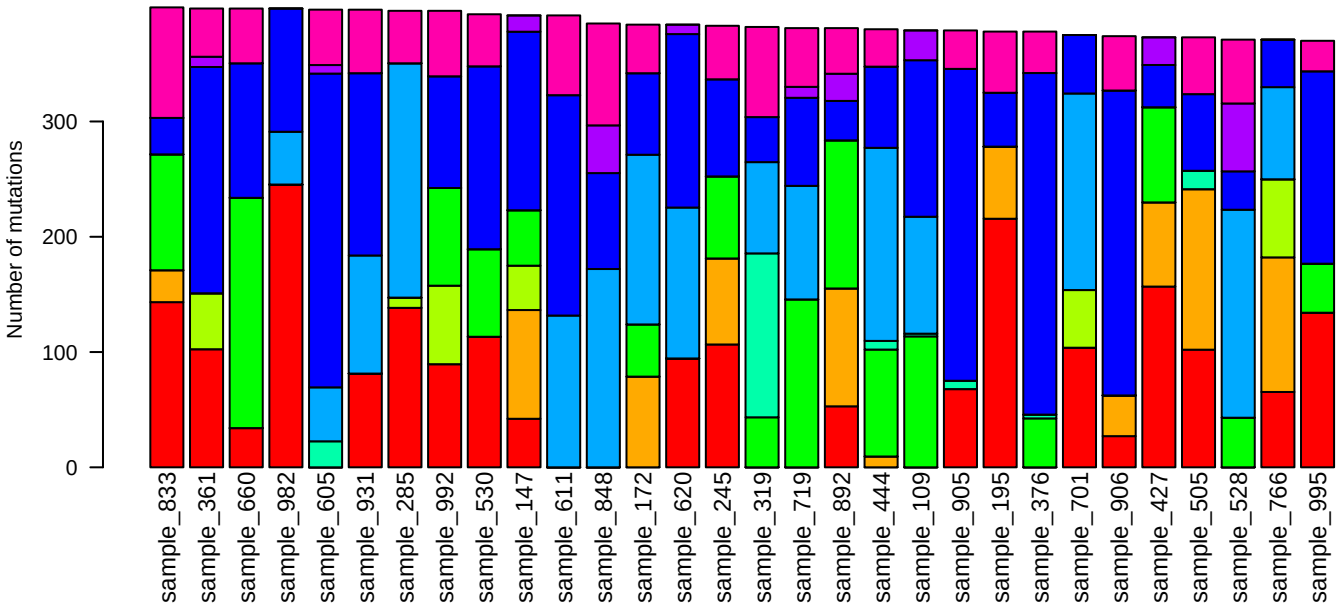
sample_234
sample_487


Number of mutations
0
100
200
300
sample_833
sample_361
sample_660
sample_982
sample_605
sample_931
sample_285
sample_992
sample_530
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sample_611
sample_848
sample_172
sample_620
sample_245
sample_319
sample_719
sample_892
sample_444
sample_109
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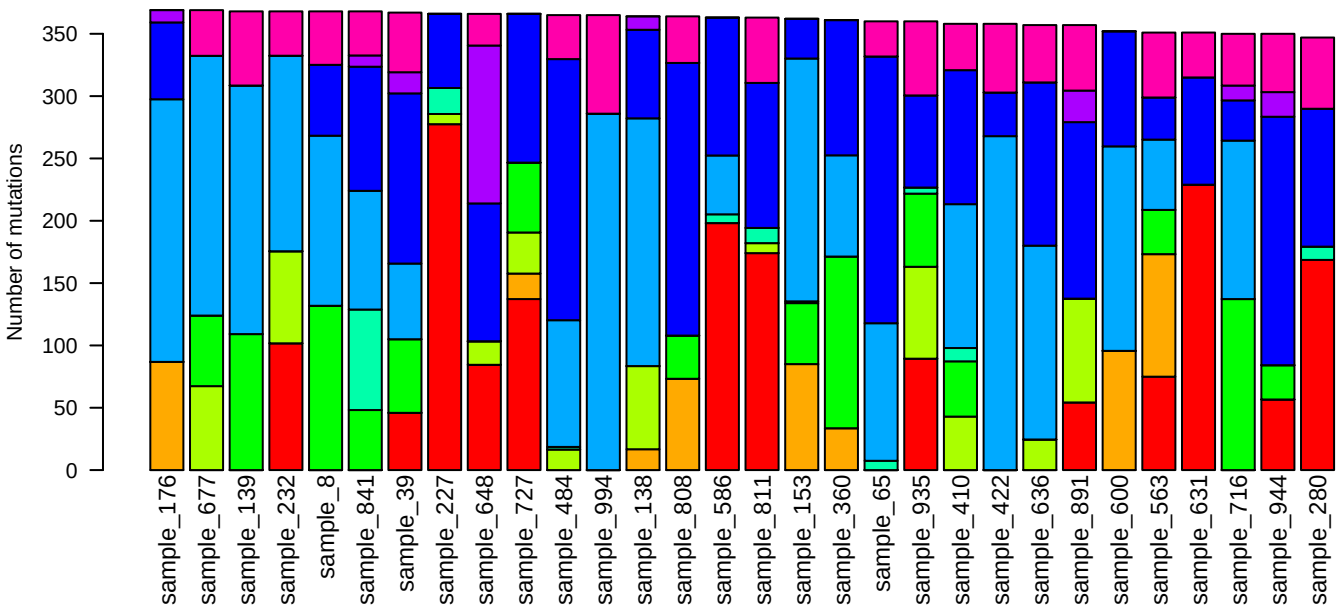
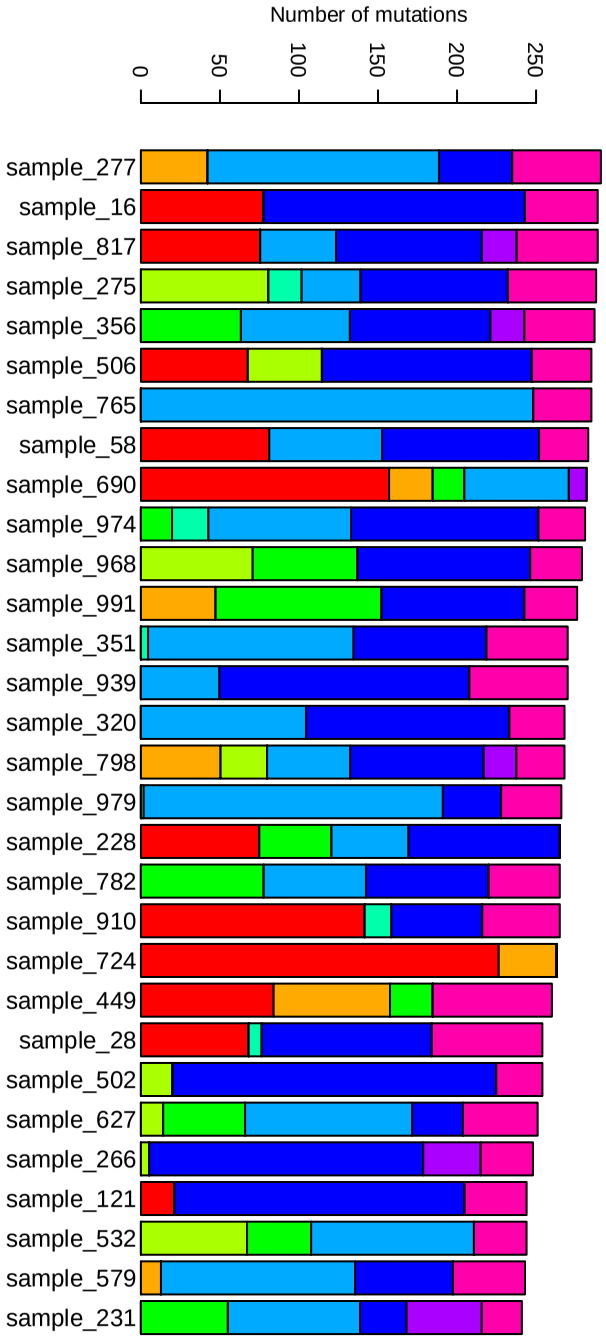
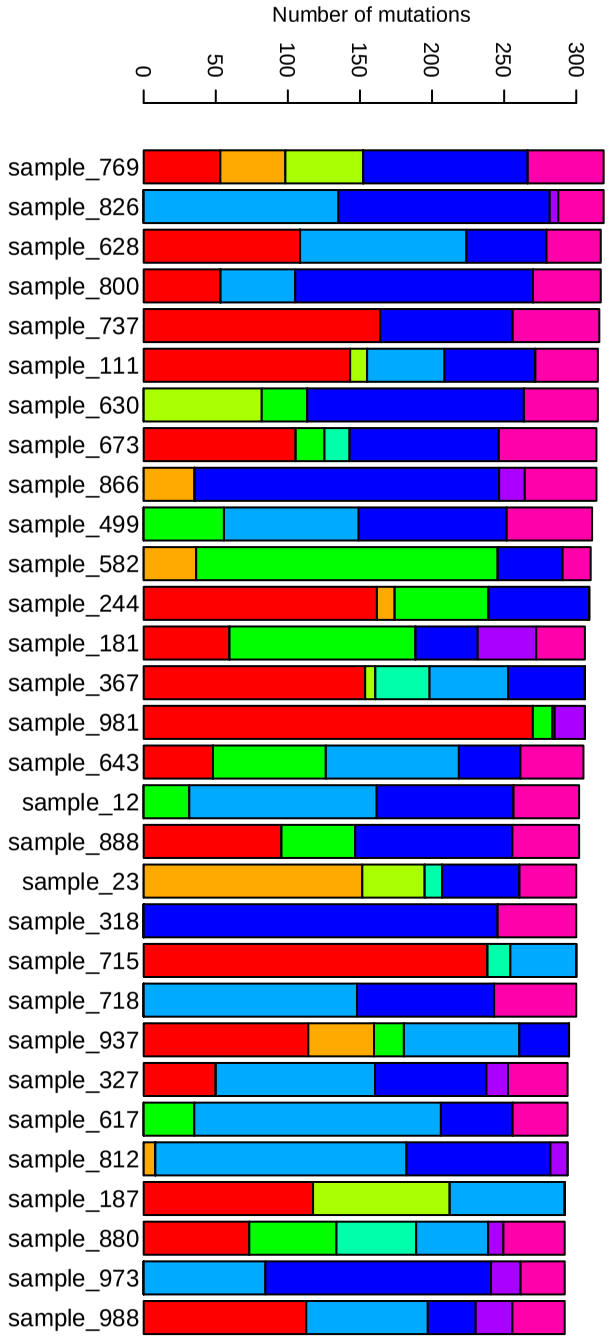
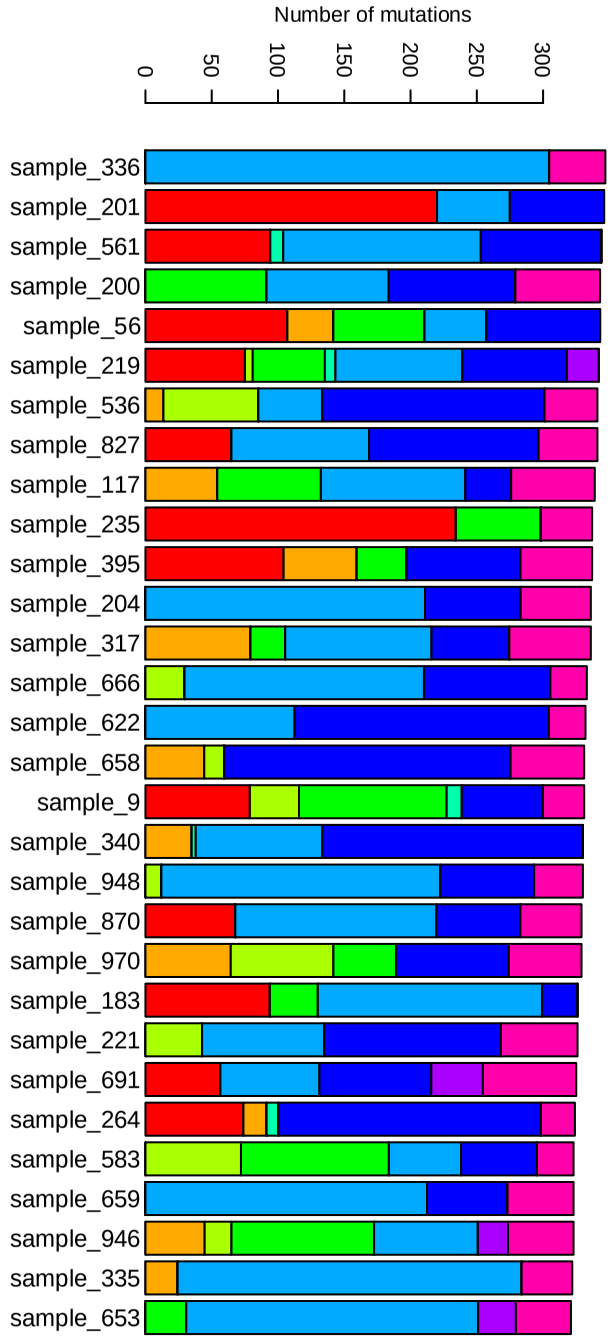
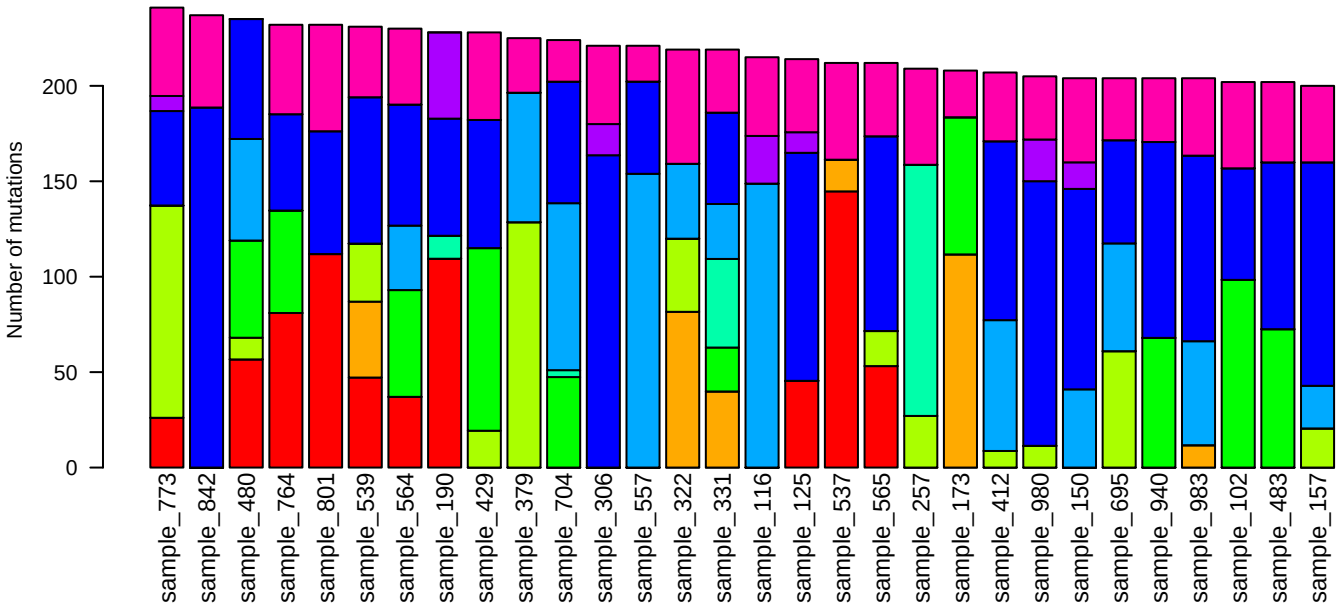
sample_195
sample_376
sample_701
sample_906
sample_427
sample_505
sample_528
sample_766
sample_995

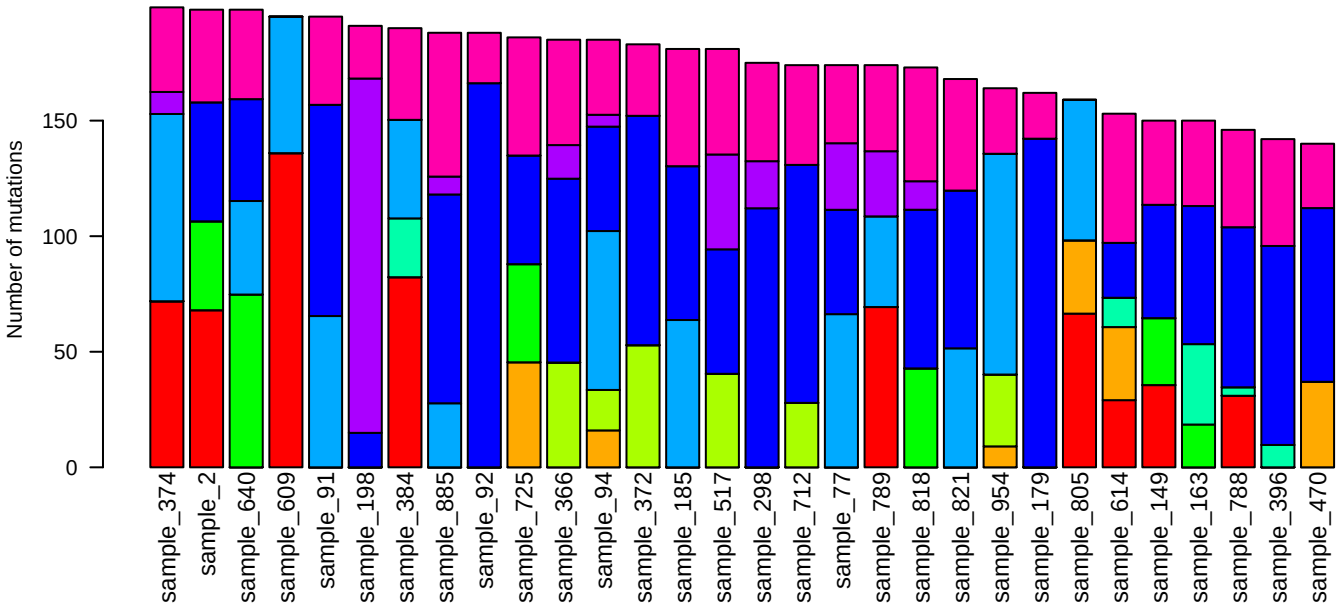

Number of mutations
0
50
100
150
200
250
300
350
sample_176
sample_677
sample_139
sample_232
sample_8
sample_841
sample_39
sample_227
sample_648
sample_727
sample_484
sample_994
sample_138
sample_808
sample_586
sample_811
sample_153
sample_360
sample_65
sample_935
sample_410
sample_422
sample_636
sample_891
sample_600
sample_563
sample_631
sample_716
sample_944
sample_280

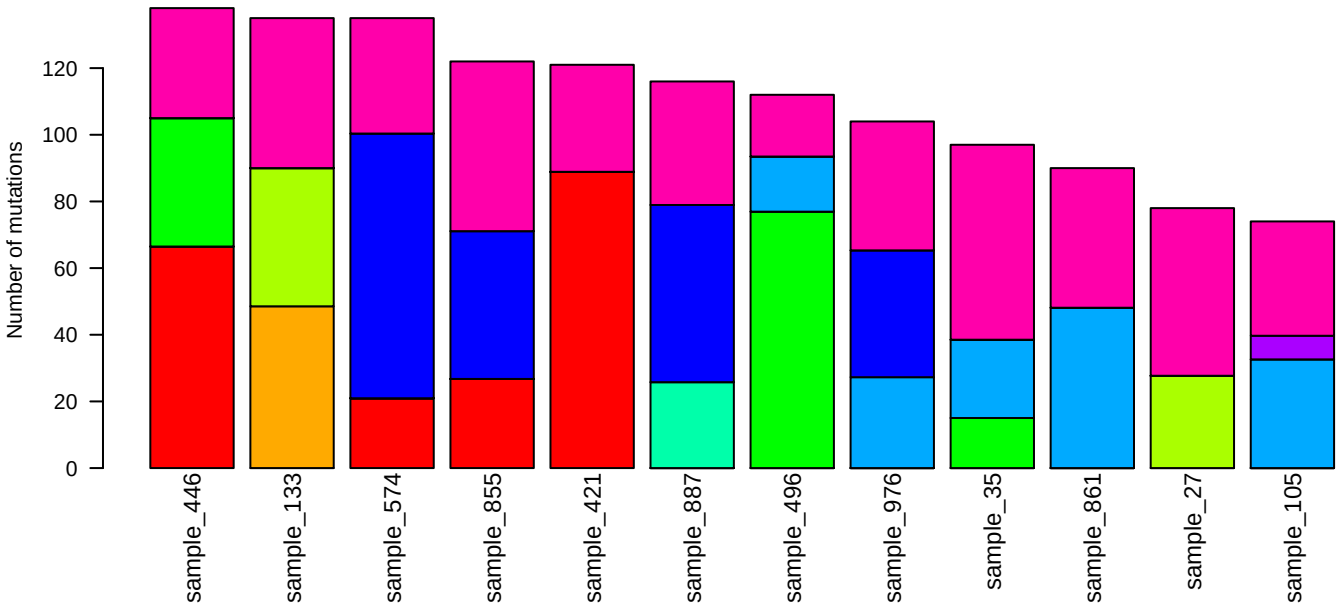

Number of mutations
0
50
100
150
200
250
sample_277
sample_16
sample_817
sample_275
sample_356
sample_506
sample_765
sample_58
sample_690
sample_974
sample_968
sample_991
sample_351
sample_939
sample_320
sample_798
sample_979
sample_228
sample_782
sample_910
sample_724
sample_449
sample_28
sample_502
sample_627
sample_266
sample_121
sample_532
sample_579
sample_231


Number of mutations
0
50
100
150
200
250
300
sample_769
sample_826
sample_628
sample_800
sample_737
sample_111
sample_630
sample_673
sample_866
sample_499
sample_582
sample_244
sample_181
sample_367
sample_981
sample_643
sample_12
sample_888
sample_23
sample_318
sample_715
sample_718
sample_937
sample_327
sample_617
sample_812
sample_187
sample_880
sample_973
sample_988


Number of mutations
0
50
100
150
200
250
300
sample_336
sample_201
sample_561
sample_200
sample_56
sample_219
sample_536
sample_827
sample_117
sample_235
sample_395
sample_204
sample_317
sample_666
sample_622
sample_658
sample_9
sample_340
sample_948
sample_870
sample_970
sample_183
sample_221
sample_691
sample_264
sample_583
sample_659
sample_946
sample_335
sample_653


Number of mutations
0
50
100
150
200
sample_773
sample_842
sample_480
sample_764
sample_801
sample_539
sample_564
sample_190
sample_429
sample_379
sample_704
sample_306
sample_557
sample_322
sample_331
sample_116
sample_125
sample_537
sample_565
sample_257
sample_173
sample_412
sample_980
sample_150
sample_695
sample_940
sample_983
sample_102
sample_483
sample_157


Number of mutations
0
50
100
150
sample_374
sample_2
sample_640
sample_609
sample_91
sample_198
sample_384
sample_885
sample_92
sample_725
sample_366
sample_94
sample_372
sample_185
sample_517
sample_298
sample_712
sample_77
sample_789
sample_818
sample_821
sample_954
sample_179
sample_805
sample_614
sample_149
sample_163
sample_788
sample_396
sample_470


Number of mutations
0
20
40
60
80
100
120
sample_446
sample_133
sample_574
sample_855
sample_421
sample_887
sample_496
sample_976
sample_35
sample_861
sample_27
sample_105