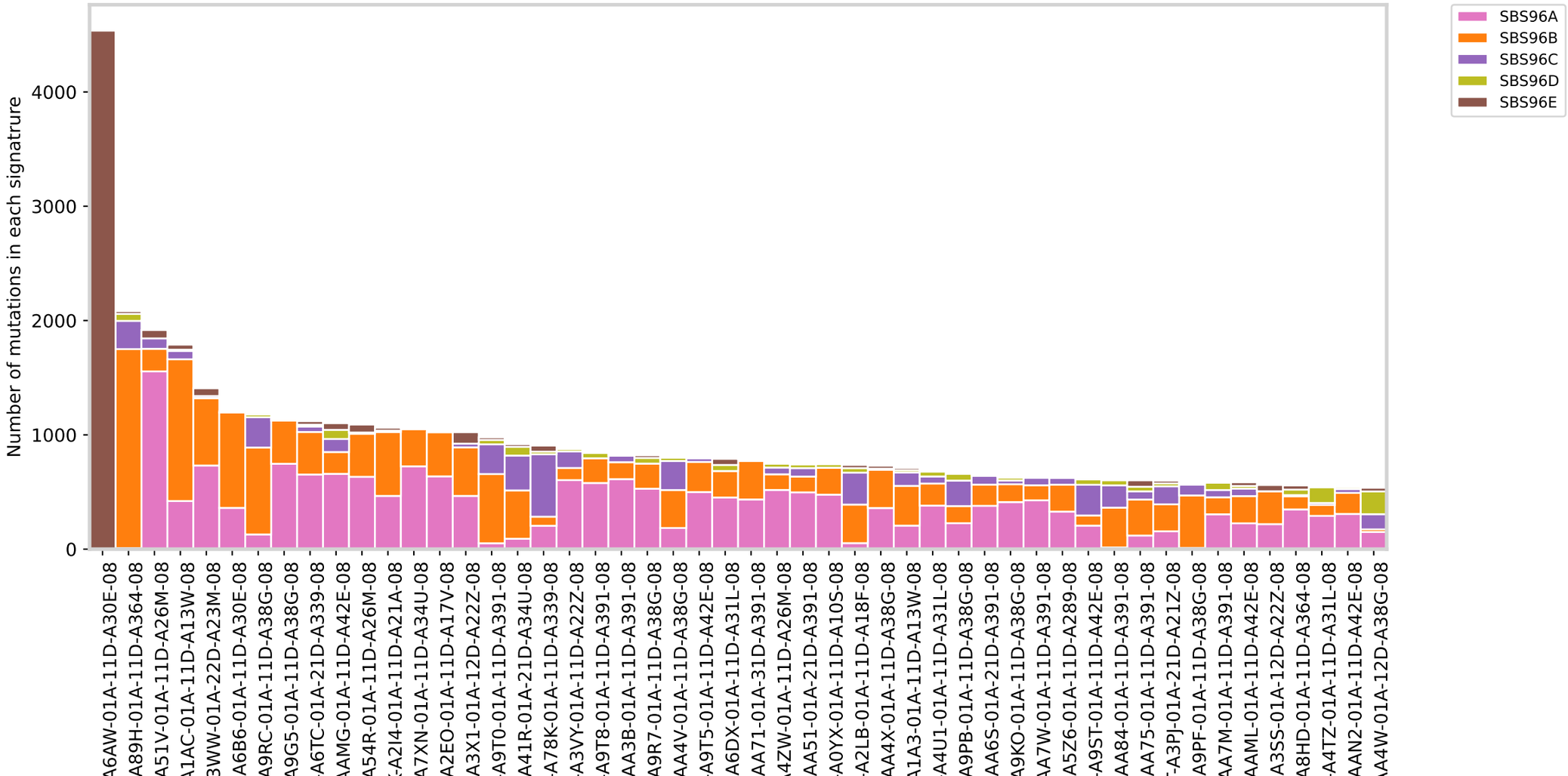
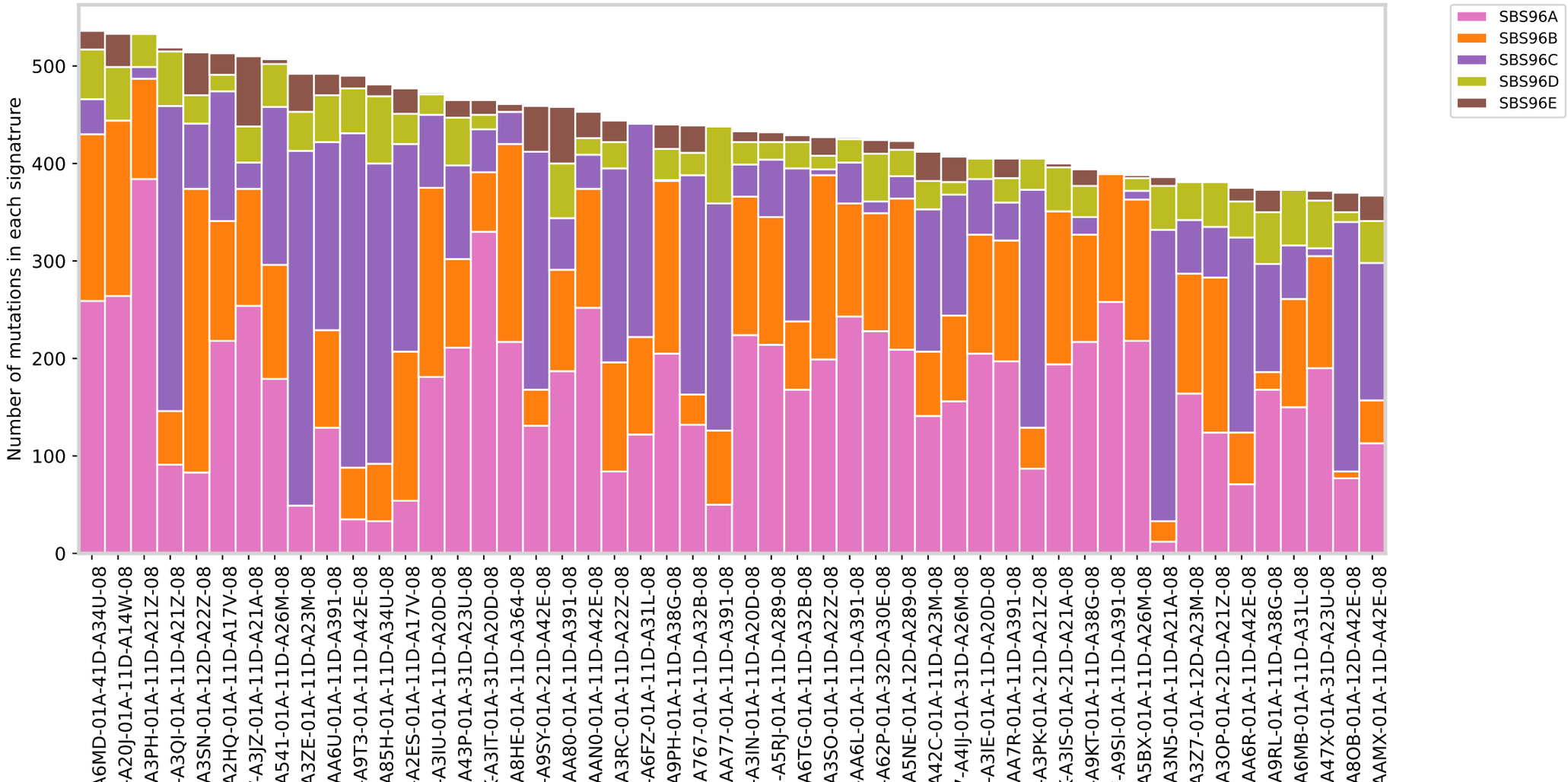
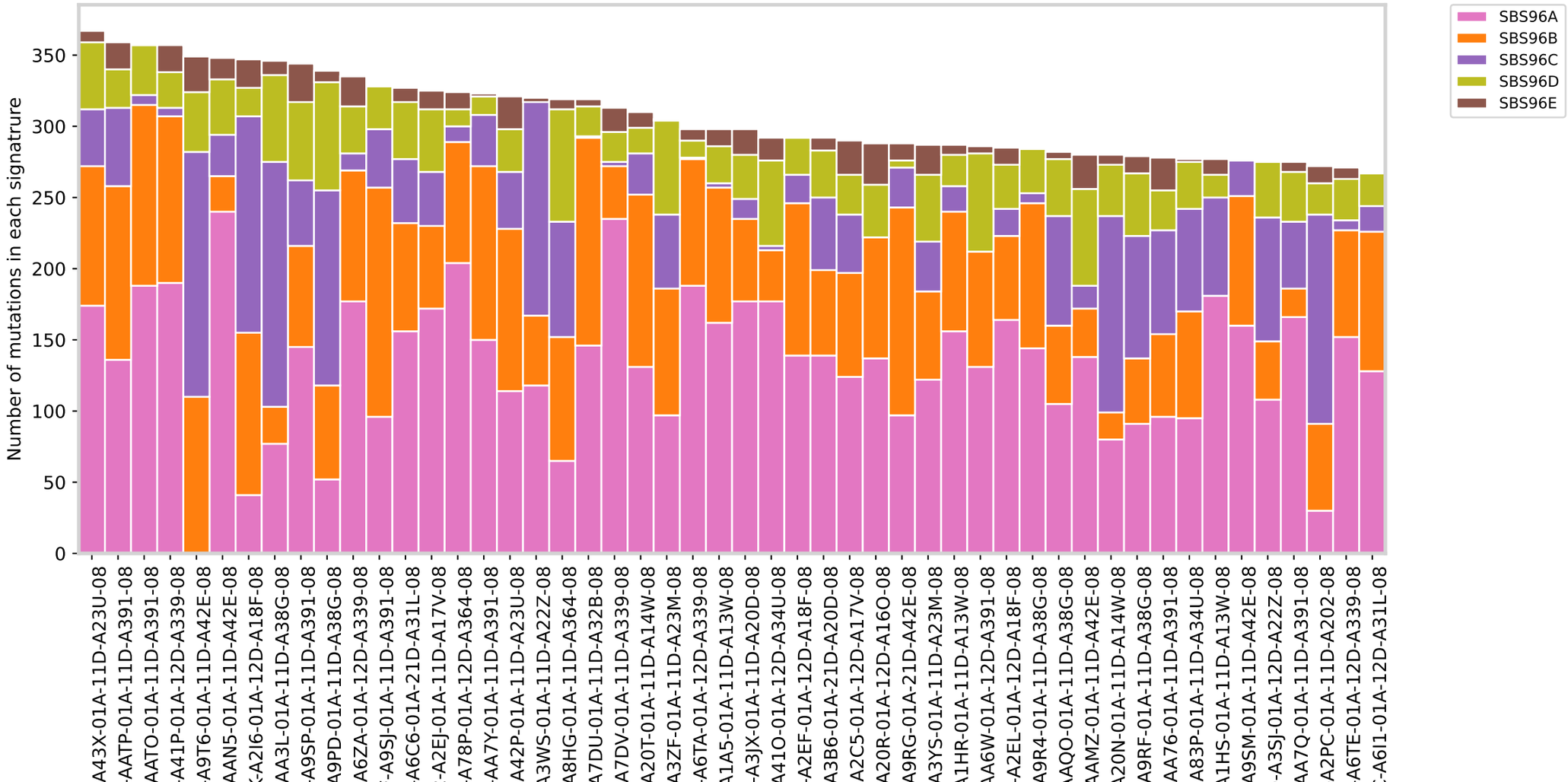
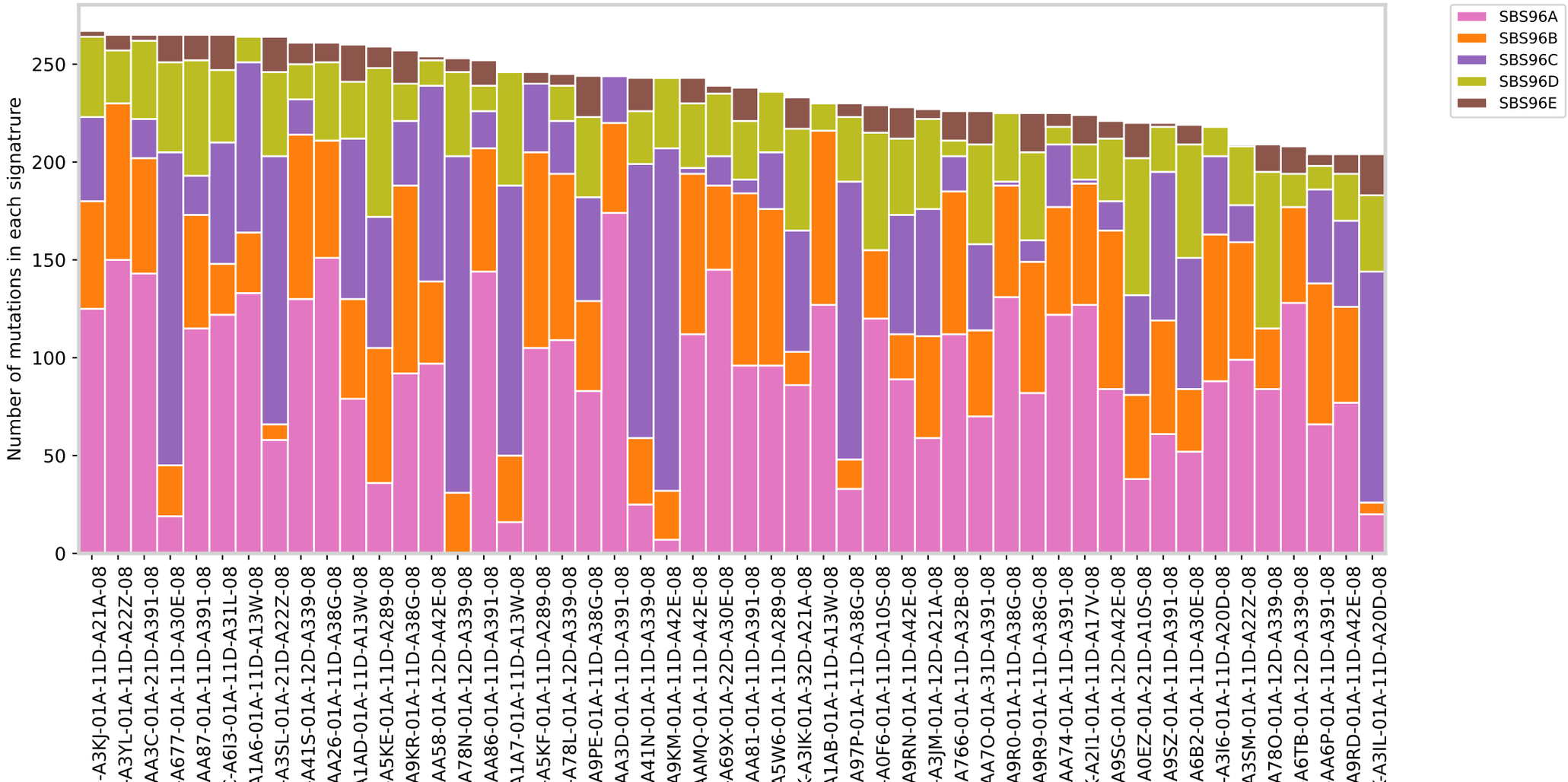
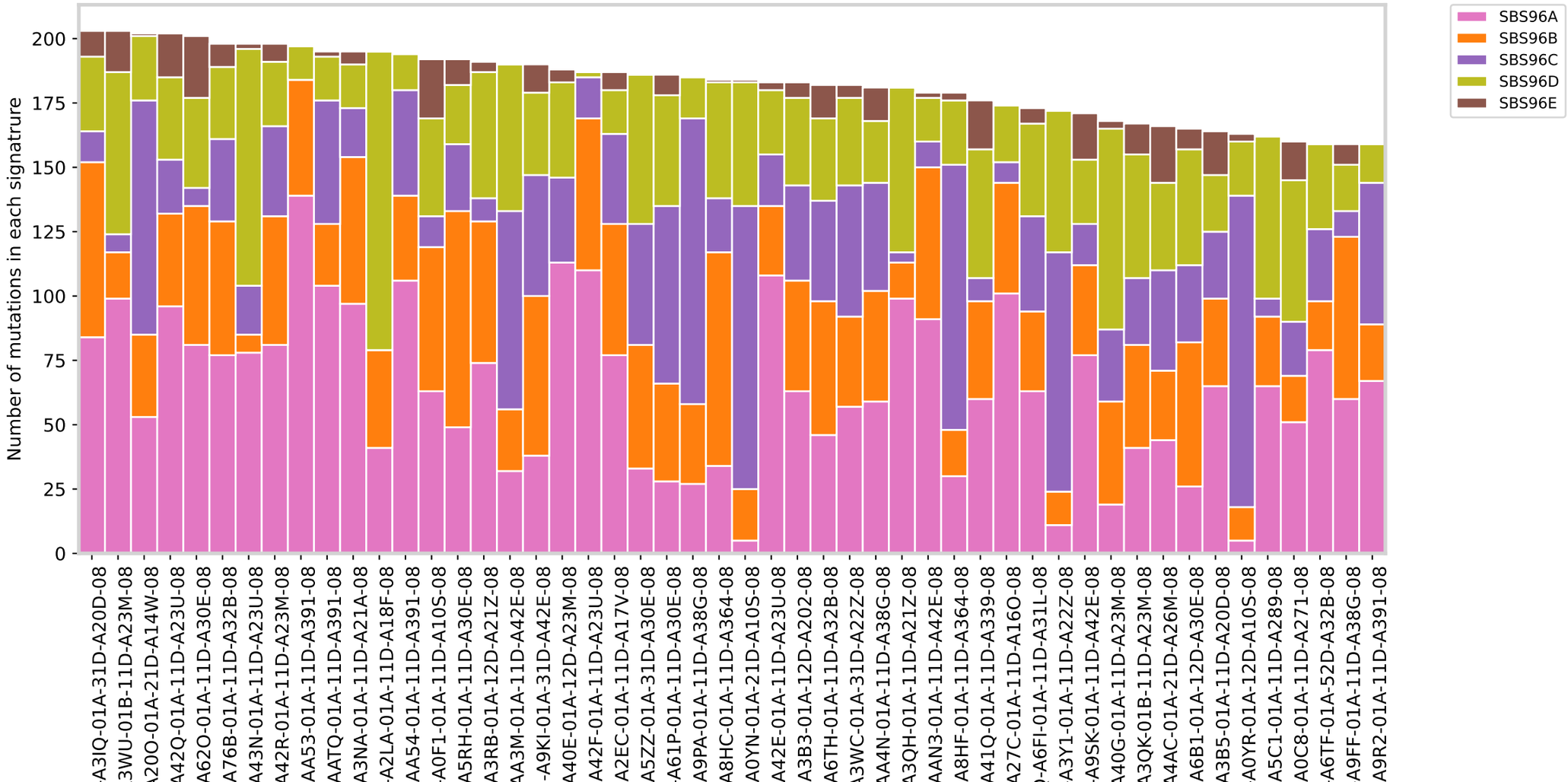
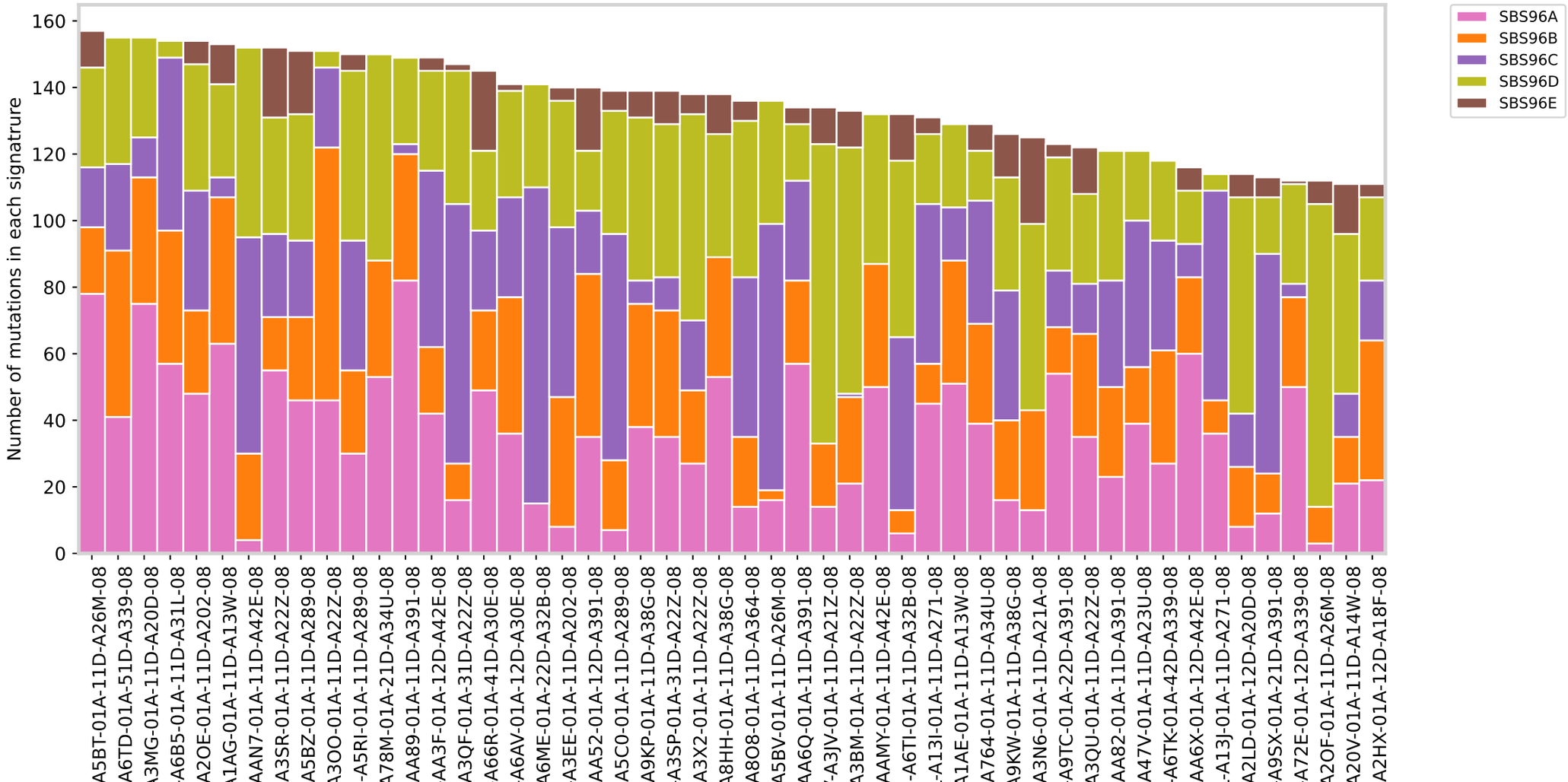

SBS96A
SBS96B
SBS96C
SBS96D
SBS96E
Number of mutations in each signatrure
0
1000
2000
3000
4000
A6AW-01A-11D-A30E-08
A89H-01A-11D-A364-08
A51V-01A-11D-A26M-08
A1AC-01A-11D-A13W-08
3WW-01A-22D-A23M-08
A6B6-01A-11D-A30E-08
A9RC-01A-11D-A38G-08
A9G5-01A-11D-A38G-08
A6TC-01A-21D-A339-08
AAMG-01A-11D-A42E-08
A54R-01A-11D-A26M-08
:A2I4-01A-11D-A21A-08
A7XN-01A-11D-A34U-08
A2EO-01A-11D-A17V-08
A3X1-01A-12D-A22Z-08
A9T0-01A-11D-A391-08
A41R-01A-21D-A34U-08
A78K-01A-11D-A339-08
A3VY-01A-11D-A22Z-08
A9T8-01A-11D-A391-08
AA3B-01A-11D-A391-08
A9R7-01A-11D-A38G-08
AA4V-01A-11D-A38G-08
A9T5-01A-11D-A42E-08
A6DX-01A-11D-A31L-08
AA71-01A-31D-A391-08
4ZW-01A-11D-A26M-08
AA51-01A-21D-A391-08
A0YX-01A-11D-A10S-08
A2LB-01A-11D-A18F-08
AA4X-01A-11D-A38G-08
A1A3-01A-11D-A13W-08
A4U1-01A-11D-A31L-08
A9PB-01A-11D-A38G-08
AA6S-01A-21D-A391-08
A9KO-01A-11D-A38G-08
AA7W-01A-11D-A391-08
A5Z6-01A-11D-A289-08
-A9ST-01A-11D-A42E-08
AA84-01A-11D-A391-08
AA75-01A-11D-A391-08
-A3PJ-01A-21D-A21Z-08
A9PF-01A-11D-A38G-08
AA7M-01A-11D-A391-08
AAML-01A-11D-A42E-08
A3SS-01A-12D-A22Z-08
A8HD-01A-11D-A364-08
-A4TZ-01A-11D-A31L-08
AAN2-01A-11D-A42E-08
A4W-01A-12D-A38G-08

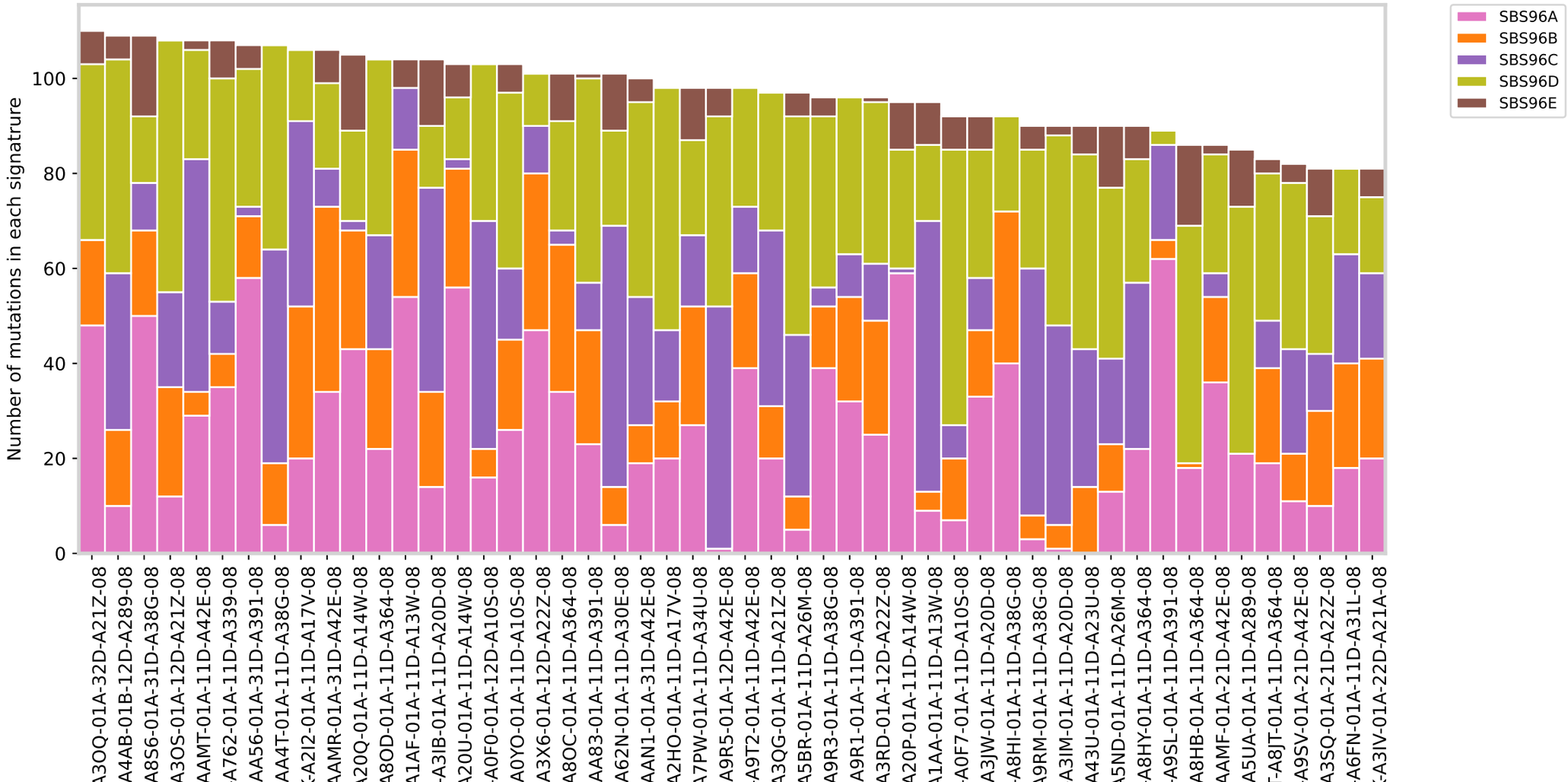

SBS96A
SBS96B
SBS96C
SBS96D
SBS96E
Number of mutations in each signatrure
0
100
200
300
400
500
A6MD-01A-41D-A34U-08
A20J-01A-11D-A14W-08
A3PH-01A-11D-A21Z-08
A3QI-01A-11D-A21Z-08
A3SN-01A-12D-A22Z-08
A2HQ-01A-11D-A17V-08
A3JZ-01A-11D-A21A-08
A541-01A-11D-A26M-08
A3ZE-01A-11D-A23M-08
AA6U-01A-11D-A391-08
A9T3-01A-11D-A42E-08
A85H-01A-11D-A34U-08
A2ES-01A-11D-A17V-08
A3IU-01A-11D-A20D-08
A43P-01A-31D-A23U-08
A3IT-01A-31D-A20D-08
A8HE-01A-11D-A364-08
A9SY-01A-21D-A42E-08
AA80-01A-11D-A391-08
AAN0-01A-11D-A42E-08
A3RC-01A-11D-A22Z-08
A6FZ-01A-11D-A31L-08
A9PH-01A-11D-A38G-08
A767-01A-11D-A32B-08
AA77-01A-11D-A391-08
A3IN-01A-11D-A20D-08
A5RJ-01A-11D-A289-08
A6TG-01A-11D-A32B-08
A3SO-01A-11D-A22Z-08
AA6L-01A-11D-A391-08
A62P-01A-32D-A30E-08
A5NE-01A-12D-A289-08
A42C-01A-11D-A23M-08
A4IJ-01A-31D-A26M-08
A3IE-01A-11D-A20D-08
AA7R-01A-11D-A391-08
A3PK-01A-21D-A21Z-08
A3IS-01A-21D-A21A-08
A9KT-01A-11D-A38G-08
A9SI-01A-11D-A391-08
A5BX-01A-11D-A26M-08
A3N5-01A-11D-A21A-08
A3Z7-01A-12D-A23M-08
A3OP-01A-21D-A21Z-08
AA6R-01A-11D-A42E-08
A9RL-01A-11D-A38G-08
A6MB-01A-11D-A31L-08
A47X-01A-31D-A23U-08
A8OB-01A-12D-A42E-08
AAMX-01A-11D-A42E-08

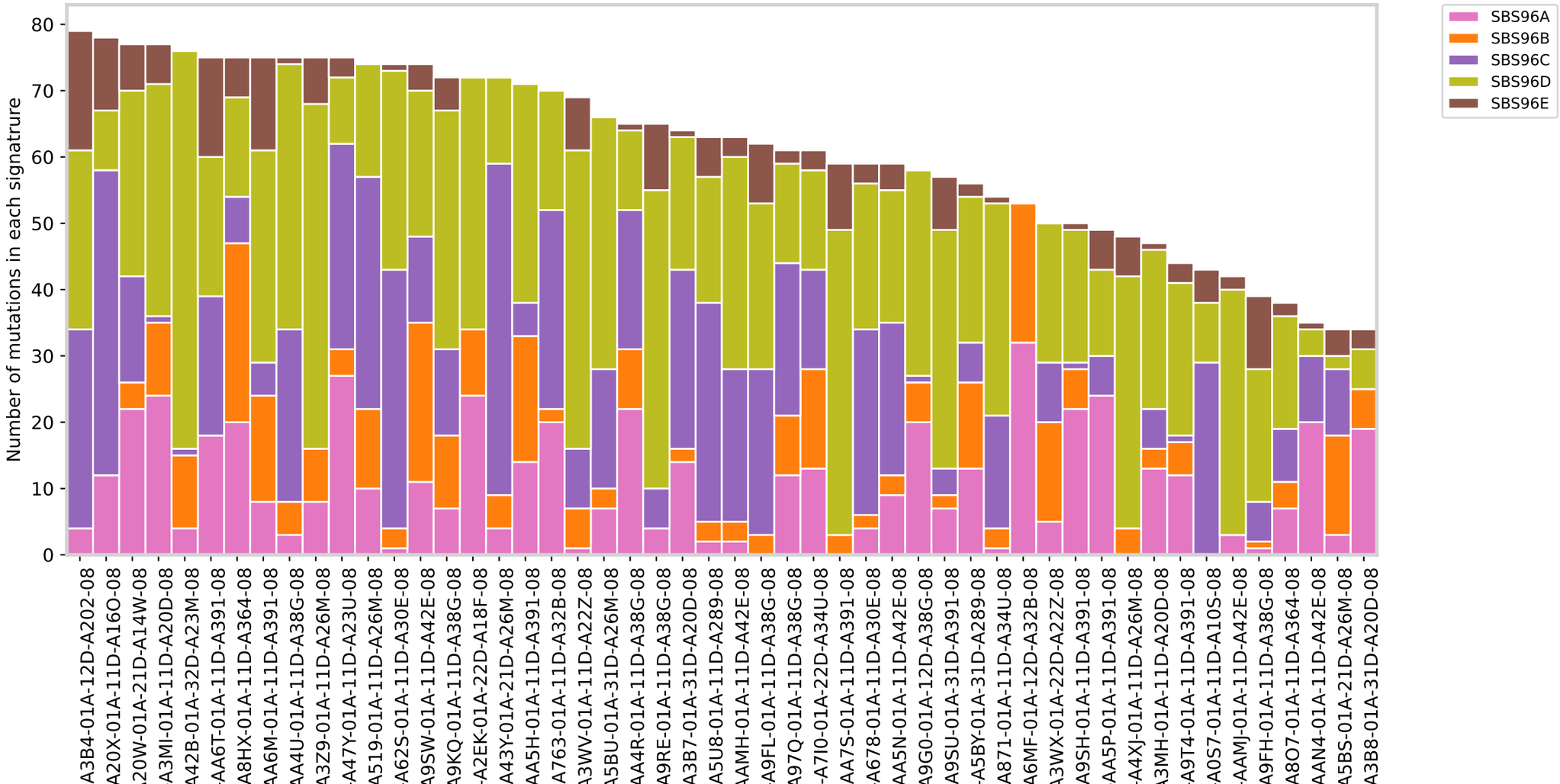

SBS96A
SBS96B
SBS96C
SBS96D
SBS96E
Number of mutations in each signatrure
0
50
100
150
200
250
300
350
A43X-01A-11D-A23U-08
AATP-01A-11D-A391-08
AATO-01A-11D-A391-08
A41P-01A-12D-A339-08
A9T6-01A-11D-A42E-08
AAN5-01A-11D-A42E-08
A2I6-01A-12D-A18F-08
AA3L-01A-11D-A38G-08
A9SP-01A-11D-A391-08
A9PD-01A-11D-A38G-08
A6ZA-01A-12D-A339-08
A9SJ-01A-11D-A391-08
A6C6-01A-21D-A31L-08
A2EJ-01A-11D-A17V-08
A78P-01A-12D-A364-08
AA7Y-01A-11D-A391-08
A42P-01A-11D-A23U-08
A3WS-01A-11D-A22Z-08
A8HG-01A-11D-A364-08
A7DU-01A-11D-A32B-08
A7DV-01A-11D-A339-08
A20T-01A-11D-A14W-08
A3ZF-01A-11D-A23M-08
A6TA-01A-12D-A339-08
A1A5-01A-11D-A13W-08
A3JX-01A-11D-A20D-08
A41O-01A-12D-A34U-08
A2EF-01A-12D-A18F-08
A3B6-01A-21D-A20D-08
A2C5-01A-12D-A17V-08
A20R-01A-12D-A16O-08
A9RG-01A-21D-A42E-08
A3YS-01A-11D-A23M-08
A1HR-01A-11D-A13W-08
AA6W-01A-12D-A391-08
A2EL-01A-12D-A18F-08
A9R4-01A-11D-A38G-08
AAQO-01A-11D-A38G-08
AAMZ-01A-11D-A42E-08
A20N-01A-11D-A14W-08
A9RF-01A-11D-A38G-08
AA76-01A-11D-A391-08
A83P-01A-11D-A34U-08
A1HS-01A-11D-A13W-08
A9SM-01A-11D-A42E-08
A3SJ-01A-12D-A22Z-08
AA7Q-01A-11D-A391-08
A2PC-01A-11D-A202-08
A6TE-01A-12D-A339-08
A6I1-01A-12D-A31L-08

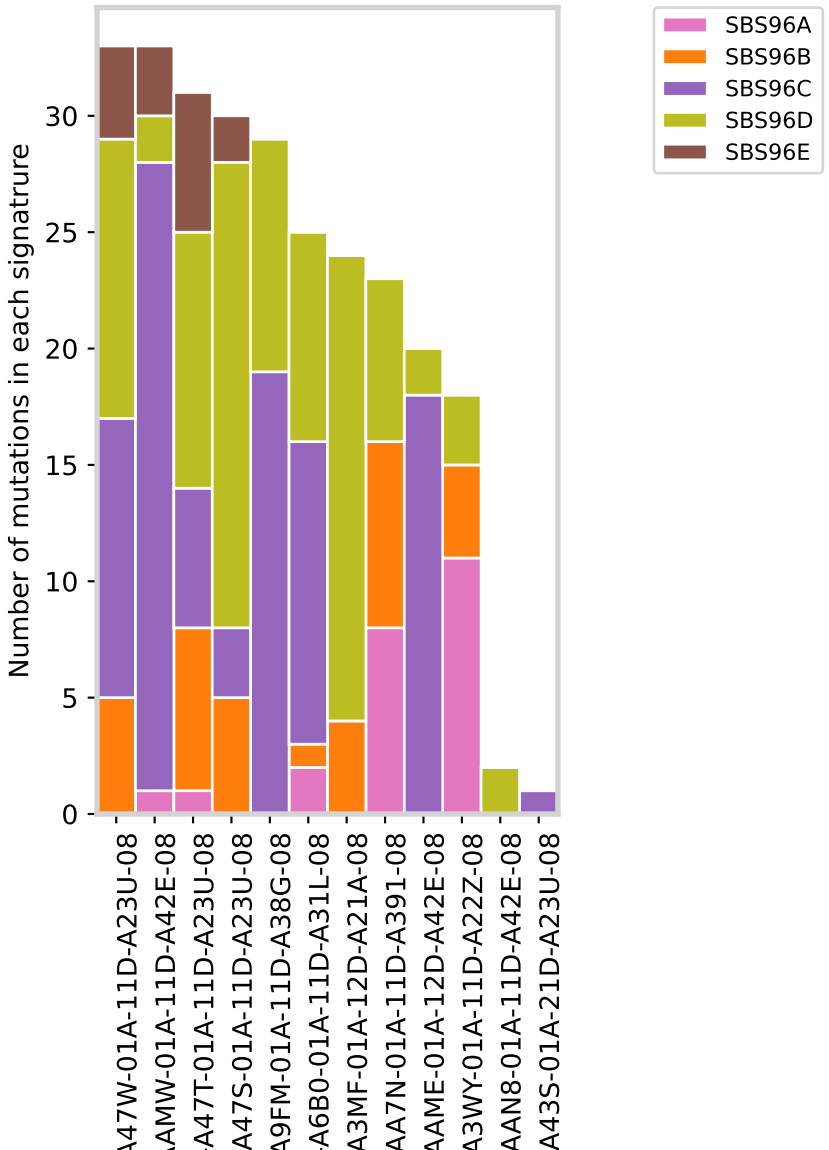

SBS96A
SBS96B
SBS96C
SBS96D
SBS96E
Number of mutations in each signatrure
0
50
100
150
200
250
-A3KJ-01A-11D-A21A-08
-A3YL-01A-11D-A22Z-08
AA3C-01A-21D-A391-08
A677-01A-11D-A30E-08
AA87-01A-11D-A391-08
-A6I3-01A-11D-A31L-08
A1A6-01A-11D-A13W-08
-A3SL-01A-21D-A22Z-08
A41S-01A-12D-A339-08
AA26-01A-11D-A38G-08
A1AD-01A-11D-A13W-08
A5KE-01A-11D-A289-08
A9KR-01A-11D-A38G-08
AA58-01A-12D-A42E-08
A78N-01A-12D-A339-08
AA86-01A-11D-A391-08
A1A7-01A-11D-A13W-08
A5KF-01A-11D-A289-08
A78L-01A-12D-A339-08
A9PE-01A-11D-A38G-08
AA3D-01A-11D-A391-08
A41N-01A-11D-A339-08
A9KM-01A-11D-A42E-08
AAMQ-01A-11D-A42E-08
A69X-01A-22D-A30E-08
AA81-01A-11D-A391-08
A5W6-01A-11D-A289-08
-A3IK-01A-32D-A21A-08
A1AB-01A-11D-A13W-08
A97P-01A-11D-A38G-08
-A0F6-01A-11D-A10S-08
A9RN-01A-11D-A42E-08
-A3JM-01A-12D-A21A-08
A766-01A-11D-A32B-08
AA7O-01A-31D-A391-08
A9R0-01A-11D-A38G-08
A9R9-01A-11D-A38G-08
AA74-01A-11D-A391-08
-A2I1-01A-11D-A17V-08
A9SG-01A-12D-A42E-08
A0EZ-01A-21D-A10S-08
A9SZ-01A-11D-A391-08
A6B2-01A-11D-A30E-08
-A3I6-01A-11D-A20D-08
A3SM-01A-11D-A22Z-08
A78O-01A-12D-A339-08
A6TB-01A-12D-A339-08
AA6P-01A-11D-A391-08
A9RD-01A-11D-A42E-08
-A3IL-01A-11D-A20D-08


SBS96A
SBS96B
SBS96C
SBS96D
SBS96E
Number of mutations in each signatrure
0
25
50
75
100
125
150
175
200
A3IQ-01A-31D-A20D-08
3WU-01B-11D-A23M-08
20O-01A-21D-A14W-08
A42Q-01A-11D-A23U-08
A62O-01A-11D-A30E-08
A76B-01A-11D-A32B-08
A43N-01A-11D-A23U-08
A42R-01A-11D-A23M-08
AA53-01A-11D-A391-08
AATQ-01A-11D-A391-08
A3NA-01A-11D-A21A-08
-A2LA-01A-11D-A18F-08
AA54-01A-11D-A391-08
-A0F1-01A-11D-A10S-08
A5RH-01A-11D-A30E-08
A3RB-01A-12D-A21Z-08
AA3M-01A-11D-A42E-08
-A9KI-01A-31D-A42E-08
A40E-01A-12D-A23M-08
A42F-01A-11D-A23U-08
A2EC-01A-11D-A17V-08
A5ZZ-01A-31D-A30E-08
-A61P-01A-11D-A30E-08
A9PA-01A-11D-A38G-08
A8HC-01A-11D-A364-08
A0YN-01A-21D-A10S-08
A42E-01A-11D-A23U-08
A3B3-01A-12D-A202-08
A6TH-01A-11D-A32B-08
A3WC-01A-31D-A22Z-08
AA4N-01A-11D-A38G-08
A3QH-01A-11D-A21Z-08
AAN3-01A-11D-A42E-08
A8HF-01A-11D-A364-08
A41Q-01A-11D-A339-08
A27C-01A-11D-A16O-08
-A6FI-01A-11D-A31L-08
A3Y1-01A-11D-A22Z-08
-A9SK-01A-11D-A42E-08
A40G-01A-11D-A23M-08
A3QK-01B-11D-A23M-08
A4AC-01A-21D-A26M-08
A6B1-01A-12D-A30E-08
A3B5-01A-11D-A20D-08
A0YR-01A-12D-A10S-08
A5C1-01A-11D-A289-08
A0C8-01A-11D-A271-08
A6TF-01A-52D-A32B-08
A9FF-01A-11D-A38G-08
A9R2-01A-11D-A391-08


Number of mutations in each signatrure
0
20
40
60
80
100
120
140
160
SBS96A
SBS96B
SBS96C
SBS96D
SBS96E
A5BT-01A-11D-A26M-08
A6TD-01A-51D-A339-08
A3MG-01A-11D-A20D-08
A6B5-01A-11D-A31L-08
A2OE-01A-11D-A202-08
A1AG-01A-11D-A13W-08
AAN7-01A-11D-A42E-08
A3SR-01A-11D-A22Z-08
A5BZ-01A-11D-A289-08
A3OO-01A-11D-A22Z-08
-A5RI-01A-11D-A289-08
A78M-01A-21D-A34U-08
AA89-01A-11D-A391-08
AA3F-01A-12D-A42E-08
A3QF-01A-31D-A22Z-08
A66R-01A-41D-A30E-08
A6AV-01A-12D-A30E-08
A6ME-01A-22D-A32B-08
A3EE-01A-11D-A202-08
AA52-01A-12D-A391-08
A5C0-01A-11D-A289-08
A9KP-01A-11D-A38G-08
A3SP-01A-31D-A22Z-08
A3X2-01A-11D-A22Z-08
A8HH-01A-11D-A38G-08
A8O8-01A-11D-A364-08
A5BV-01A-11D-A26M-08
AA6Q-01A-11D-A391-08
-A3JV-01A-11D-A21Z-08
A3BM-01A-11D-A22Z-08
AAMY-01A-11D-A42E-08
-A6TI-01A-11D-A32B-08
-A13I-01A-11D-A271-08
A1AE-01A-11D-A13W-08
A764-01A-11D-A34U-08
A9KW-01A-11D-A38G-08
A3N6-01A-11D-A21A-08
A9TC-01A-22D-A391-08
A3QU-01A-11D-A22Z-08
AA82-01A-11D-A391-08
A47V-01A-11D-A23U-08
-A6TK-01A-42D-A339-08
AA6X-01A-12D-A42E-08
-A13J-01A-11D-A271-08
A2LD-01A-12D-A20D-08
A9SX-01A-21D-A391-08
A72E-01A-12D-A339-08
A2OF-01A-11D-A26M-08
A20V-01A-11D-A14W-08
A2HX-01A-12D-A18F-08


SBS96A
SBS96B
SBS96C
SBS96D
SBS96E
Number of mutations in each signatrure
0
20
40
60
80
100
A3OQ-01A-32D-A21Z-08
A4AB-01B-12D-A289-08
A8S6-01A-31D-A38G-08
A3OS-01A-12D-A21Z-08
AAMT-01A-11D-A42E-08
A762-01A-11D-A339-08
AA56-01A-31D-A391-08
AA4T-01A-11D-A38G-08
A2I2-01A-11D-A17V-08
AAMR-01A-31D-A42E-08
A20Q-01A-11D-A14W-08
A8OD-01A-11D-A364-08
A1AF-01A-11D-A13W-08
A3IB-01A-11D-A20D-08
A20U-01A-11D-A14W-08
A0F0-01A-12D-A10S-08
A0YO-01A-11D-A10S-08
A3X6-01A-12D-A22Z-08
A8OC-01A-11D-A364-08
AA83-01A-11D-A391-08
A62N-01A-11D-A30E-08
AAN1-01A-31D-A42E-08
A2HO-01A-11D-A17V-08
A7PW-01A-11D-A34U-08
A9R5-01A-12D-A42E-08
A9T2-01A-11D-A42E-08
A3QG-01A-11D-A21Z-08
A5BR-01A-11D-A26M-08
A9R3-01A-11D-A38G-08
A9R1-01A-11D-A391-08
A3RD-01A-12D-A22Z-08
A20P-01A-11D-A14W-08
A1AA-01A-11D-A13W-08
A0F7-01A-11D-A10S-08
A3JW-01A-11D-A20D-08
A8HI-01A-11D-A38G-08
A9RM-01A-11D-A38G-08
A3IM-01A-11D-A20D-08
A43U-01A-11D-A23U-08
A5ND-01A-11D-A26M-08
A8HY-01A-11D-A364-08
A9SL-01A-11D-A391-08
A8HB-01A-11D-A364-08
AAMF-01A-21D-A42E-08
A5UA-01A-11D-A289-08
A8JT-01A-11D-A364-08
A9SV-01A-21D-A42E-08
A3SQ-01A-21D-A22Z-08
A6FN-01A-11D-A31L-08
A3IV-01A-22D-A21A-08


Number of mutations in each signatrure
0
10
20
30
40
50
60
70
80
SBS96A
SBS96B
SBS96C
SBS96D
SBS96E
A3B4-01A-12D-A202-08
A20X-01A-11D-A16O-08
A20W-01A-21D-A14W-08
A3MI-01A-11D-A20D-08
A42B-01A-32D-A23M-08
AA6T-01A-11D-A391-08
A8HX-01A-11D-A364-08
AA6M-01A-11D-A391-08
AA4U-01A-11D-A38G-08
A3Z9-01A-11D-A26M-08
A47Y-01A-11D-A23U-08
A519-01A-11D-A26M-08
A62S-01A-11D-A30E-08
A9SW-01A-11D-A42E-08
A9KQ-01A-11D-A38G-08
-A2EK-01A-22D-A18F-08
A43Y-01A-21D-A26M-08
AA5H-01A-11D-A391-08
A763-01A-11D-A32B-08
A3WV-01A-11D-A22Z-08
A5BU-01A-31D-A26M-08
AA4R-01A-11D-A38G-08
A9RE-01A-11D-A38G-08
A3B7-01A-31D-A20D-08
A5U8-01A-11D-A289-08
AAMH-01A-11D-A42E-08
A9FL-01A-11D-A38G-08
A97Q-01A-11D-A38G-08
-A7I0-01A-22D-A34U-08
AA7S-01A-11D-A391-08
A678-01A-11D-A30E-08
AA5N-01A-11D-A42E-08
A9G0-01A-12D-A38G-08
A9SU-01A-31D-A391-08
-A5BY-01A-31D-A289-08
A871-01A-11D-A34U-08
A6MF-01A-12D-A32B-08
A3WX-01A-22D-A22Z-08
A9SH-01A-11D-A391-08
AA5P-01A-11D-A391-08
-A4XJ-01A-11D-A26M-08
A3MH-01A-11D-A20D-08
A9T4-01A-11D-A391-08
A0S7-01A-11D-A10S-08
-AAMJ-01A-11D-A42E-08
A9FH-01A-11D-A38G-08
A8O7-01A-11D-A364-08
AAN4-01A-11D-A42E-08
A5BS-01A-21D-A26M-08
A3B8-01A-31D-A20D-08


SBS96A
SBS96B
SBS96C
SBS96D
SBS96E
Number of mutations in each signatrure
0
5
10
15
20
25
30
A47W-01A-11D-A23U-08
AMW-01A-11D-A42E-08
A47T-01A-11D-A23U-08
A47S-01A-11D-A23U-08
A9FM-01A-11D-A38G-08
A6B0-01A-11D-A31L-08
A3MF-01A-12D-A21A-08
AA7N-01A-11D-A391-08
AAME-01A-12D-A42E-08
A3WY-01A-11D-A22Z-08
AAN8-01A-11D-A42E-08
A43S-01A-21D-A23U-08