

Table 2. SGX393 single-agent cell-based mutagenesis assays

| [SGX393] | Total wells analyzed | Sequenced clones (KD mutant clones) | Mutation(s) | # Occurrences | Frequency by mutation (%) | Fraction of mutated sequences (%) | Residue | Frequency by residue (%) | Fraction of mutated residues (%) | | | |
|----------|----------------------|-------------------------------------|----------------|---------------|---------------------------|-----------------------------------|----------------|--------------------------|----------------------------------|----------------|------|-----|
| 120nM | 192 | n=48 (21) | Native Bcr-Abl | 27 | 56.3 | --- | Native Bcr-Abl | 56.3 | --- | | | |
| | | | L248R | 1 | 2.1 | 4.8 | 248 | 2.1 | 4.8 | | | |
| | | | G250E | 2 | 4.2 | 9.5 | 250 | 6.3 | 14.3 | | | |
| | | | G250W | 1 | 2.1 | 4.8 | | | | | | |
| | | | Y253F | 3 | 6.3 | 14.3 | | | | | | |
| | | | Y253H | 1 | 2.1 | 4.8 | 253 | 10.4 | 23.8 | | | |
| | | | Y253N | 1 | 2.1 | 4.8 | | | | | | |
| | | | E255K | 2 | 4.2 | 9.5 | | | | | | |
| | | | E255V | 2 | 4.2 | 9.5 | 255 | 8.3 | 19.0 | | | |
| | | | F311I | 1 | 2.1 | 4.8 | | | | | | |
| | | | F317C | 1 | 2.1 | 4.8 | | | | | | |
| | | | F317I | 2 | 4.2 | 9.5 | 317 | 14.6 | 33.3 | | | |
| | | | F317L | 2 | 4.2 | 9.5 | | | | | | |
| | | | F317V | 2 | 4.2 | 9.5 | | | | | | |
| | | | 240nM | 480 | n=243 (204) | Native Bcr-Abl | 39 | 16.0 | --- | Native Bcr-Abl | 16.0 | --- |
| L248M | 1 | 0.4 | | | | 0.5 | 248 | 2.5 | 2.9 | | | |
| L248R | 4 | 1.6 | | | | 2.0 | | | | | | |
| L248V | 1 | 0.4 | | | | 0.5 | | | | | | |
| G249D | 2 | 0.8 | | | | 1.0 | 249 | 0.8 | 1.0 | | | |
| G250E | 47 | 19.3 | | | | 23.0 | | | | | | |
| Q252E | 1 | 0.4 | | | | 0.5 | 250 | 19.3 | 23.0 | | | |
| Q252H | 4 | 1.6 | | | | 2.0 | | | | | | |
| Y253C | 3 | 1.2 | | | | 1.5 | | | | | | |
| Y253F | 9 | 3.7 | | | | 4.4 | 253 | 15.2 | 18.1 | | | |
| Y253H | 19 | 7.8 | | | | 9.3 | | | | | | |
| Y253N | 6 | 2.5 | | | | 2.9 | | | | | | |
| E255K | 13 | 5.3 | | | | 6.4 | 255 | 9.1 | 10.8 | | | |
| E255V | 9 | 3.7 | | | | 4.4 | | | | | | |
| E258K | 4 | 1.6 | | | | 2.0 | | | | | | |
| F311I | 6 | 2.5 | | | | 2.9 | 311 | 2.5 | 2.9 | | | |
| F317C | 5 | 2.1 | | | | 2.5 | | | | | | |
| F317I | 9 | 3.7 | | | | 4.4 | | | | | | |
| F317L | 22 | 9.1 | | | | 10.8 | 317 | 29.6 | 35.3 | | | |
| F317S | 2 | 0.8 | | | | 1.0 | | | | | | |
| F317V | 34 | 14.0 | | | | 16.7 | | | | | | |
| N322K | 1 | 0.4 | | | | 0.5 | 322 | 0.4 | 0.5 | | | |
| E355G | 1 | 0.4 | | | | 0.5 | 355 | 0.4 | 0.5 | | | |
| S417Y | 1 | 0.4 | 0.5 | 417 | 0.4 | 0.5 | | | | | | |
| 480nM | 288 | n=90 (89) | Native Bcr-Abl | 1 | 1.1 | --- | Native Bcr-Abl | 1.1 | --- | | | |
| | | | L248M | 1 | 1.1 | 1.1 | 248 | 6.7 | 6.7 | | | |
| | | | L248Q | 3 | 3.3 | 3.4 | | | | | | |
| | | | L248R | 2 | 2.2 | 2.2 | | | | | | |
| | | | G249D | 2 | 2.2 | 2.2 | 249 | 2.2 | 2.2 | | | |
| | | | G250E | 20 | 22.2 | 22.5 | | | | | | |
| | | | G250V | 4 | 4.4 | 4.5 | 250 | 26.7 | 27.0 | | | |
| | | | Q252H | 5 | 5.6 | 5.6 | | | | | | |
| | | | Y253F | 4 | 4.4 | 4.5 | 252 | 5.6 | 5.6 | | | |
| | | | Y253H | 6 | 6.7 | 6.7 | | | | | | |
| | | | Y253N | 4 | 4.4 | 4.5 | | | | | | |
| | | | E255K | 1 | 1.1 | 1.1 | 253 | 15.6 | 15.7 | | | |
| | | | E255V | 4 | 4.4 | 4.5 | | | | | | |
| | | | F317C | 5 | 5.6 | 5.6 | | | | | | |
| | | | F317I | 3 | 3.3 | 3.4 | 255 | 5.6 | 5.6 | | | |
| | | | F317L | 7 | 7.8 | 7.9 | | | | | | |
| | | | F317V | 18 | 20.0 | 20.2 | | | | | | |
| 960nM | 288 | n=56 (56) | Native Bcr-Abl | 0 | 0.0 | --- | Native Bcr-Abl | 0.0 | --- | | | |
| | | | L248M | 1 | 1.8 | 1.8 | 248 | 5.4 | 5.4 | | | |
| | | | L248Q | 1 | 1.8 | 1.8 | | | | | | |
| | | | L248R | 1 | 1.8 | 1.8 | | | | | | |
| | | | G250E | 8 | 14.3 | 14.3 | 250 | 14.3 | 14.3 | | | |
| | | | Q252H | 3 | 5.4 | 5.4 | | | | | | |
| | | | Y253F | 4 | 7.1 | 7.1 | 252 | 5.4 | 5.4 | | | |
| | | | Y253N | 2 | 3.6 | 3.6 | | | | | | |
| | | | E255V | 2 | 3.6 | 3.6 | 253 | 10.7 | 10.7 | | | |
| | | | F317C | 2 | 3.6 | 3.6 | | | | | | |
| | | | F317L | 3 | 5.4 | 5.4 | | | | | | |
| | | | F317S | 1 | 1.8 | 1.8 | 255 | 3.6 | 3.6 | | | |
| | | | F317V | 28 | 50.0 | 50.0 | | | | | | |
| | | | 1920nM | 288 | n=26 (26) | Native Bcr-Abl | 0 | 0.0 | --- | Native Bcr-Abl | 0.0 | --- |
| | | | | | | L248R | 2 | 7.7 | 7.7 | 248 | 7.7 | 7.7 |
| G250E | 7 | 26.9 | | | | 26.9 | | | | | | |
| Y253F | 4 | 15.4 | | | | 15.4 | 250 | 26.9 | 26.9 | | | |
| E255V | 2 | 7.7 | | | | 7.7 | | | | | | |
| F317V | 11 | 42.3 | | | | 42.3 | 253 | 15.4 | 15.4 | | | |
| | | | | | | | | | | | | |
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NOTE: n values for each SGX393 concentration refer to the total number of sequenced clones. Numbers in parentheses that follow refer to the number of clones carrying mutant Bcr-Abl.