

| Variant Sequence | | Abundance |
|--|--|--|
| 1450A(E484K) 1709A(A570D) | | 0.006 |
| Potential chimera parent pairs | | |
| Left parent | Right parent | Multiplied Abundance |
| 1450A(E484K) / | 1501T(N501Y) / 1709A(A570D) | 0.03402 |
| 1450A(E484K) / | / 1709A(A570D) | 0.00679 |
| 1450A(E484K) / | 1450A(E484K) 1501T(N501Y) / 1709A(A570D) | 0.00231 |
| 1450A(E484K) / 1501T(N501Y) 1709A(A570D) | / 1709A(A570D) | 0.003201 |
| 1450A(E484K) / 1501T(N501Y) | / 1709A(A570D) | 0.000582 |
| Total: | | 0.046903 |
| Query (actual) Abundance | | Multiplied Parent (expected) Abundance |
| 0.006 | | < .046903 |
| 1450A(E484K) 1709A(A570D) flagged as chimera, counts redistributed | | |

Figure 3. Schema for first method of detection and removal of chimeras. Using the sequences shown in Sup. 5, the query of the least abundant sequence is shown. Potential parents whose recombination could result in the query sequence are found. The abundances of each potential pair are multiplied. The sum the multiplied pairs' abundances (expected) is then compared to the abundance of the query sequence (actual) to determine if the query sequence is a chimera. If the actual abundance is greater or equal to 1.2 times the expected abundance, the sequence is considered non-chimeric.