

| Position | Score | Pred | Note | In Frame |
|----------|-------|------|-----------------------------|----------|
| 150 | 0.528 | Yes | | FALSE |
| 176 | 0.819 | Yes | Full Length HER2 Start site | TRUE |
| 266 | 0.767 | Yes | | TRUE |
| 308 | 0.575 | Yes | | TRUE |
| 378 | 0.212 | - | | FALSE |
| 510 | 0.651 | Yes | | FALSE |
| 531 | 0.629 | Yes | | FALSE |
| 767 | 0.339 | - | | TRUE |
| 885 | 0.623 | Yes | | FALSE |
| 1019 | 0.449 | - | | TRUE |
| 1152 | 0.288 | - | | FALSE |
| 1203 | 0.133 | - | | FALSE |
| 1214 | 0.538 | Yes | | TRUE |
| 1320 | 0.335 | - | | FALSE |
| 1417 | 0.609 | Yes | | FALSE |
| 1488 | 0.631 | Yes | | FALSE |
| 1804 | 0.43 | - | | FALSE |
| 1836 | 0.286 | - | | FALSE |
| 1842 | 0.396 | - | | FALSE |
| 1887 | 0.604 | Yes | | FALSE |
| 2006 | 0.744 | Yes | M611 Start site | TRUE |
| 2028 | 0.583 | Yes | | FALSE |
| 2041 | 0.442 | - | | FALSE |
| 2088 | 0.069 | - | | FALSE |
| 2234 | 0.534 | Yes | M687 Start site | TRUE |
| 2291 | 0.46 | - | | TRUE |
| 2309 | 0.514 | Yes | | TRUE |
| 2400 | 0.242 | - | | FALSE |
| 2409 | 0.171 | - | | FALSE |
| 2495 | 0.45 | - | M774 Start site | TRUE |
| 2517 | 0.383 | - | | FALSE |
| 2576 | 0.432 | - | | TRUE |
| 2583 | 0.415 | - | | FALSE |
| 2601 | 0.375 | - | | FALSE |
| 2654 | 0.678 | Yes | | TRUE |
| 2672 | 0.546 | Yes | | TRUE |
| 2688 | 0.33 | - | | FALSE |
| 2748 | 0.348 | - | | FALSE |
| 2808 | 0.239 | - | | FALSE |
| 2814 | 0.203 | - | | FALSE |
| 2840 | 0.402 | - | | TRUE |
| 2886 | 0.312 | - | | FALSE |

| | | | | |
|------|-------|-----|--|-------|
| 2898 | 0.288 | - | | FALSE |
| 2921 | 0.507 | Yes | | TRUE |
| 2946 | 0.27 | - | | FALSE |
| 3024 | 0.427 | - | | FALSE |
| 3032 | 0.348 | - | | TRUE |
| 3038 | 0.368 | - | | TRUE |
| 3046 | 0.652 | Yes | | FALSE |
| 3053 | 0.404 | - | | TRUE |
| 3067 | 0.613 | Yes | | FALSE |
| 3110 | 0.618 | Yes | | TRUE |
| 3147 | 0.229 | - | | FALSE |
| 3210 | 0.527 | Yes | | FALSE |
| 3215 | 0.776 | Yes | | TRUE |
| 3231 | 0.287 | - | | FALSE |
| 3299 | 0.701 | Yes | | TRUE |
| 3426 | 0.585 | Yes | | FALSE |
| 3435 | 0.287 | - | | FALSE |
| 3449 | 0.602 | Yes | | TRUE |
| 3486 | 0.577 | Yes | | FALSE |
| 3549 | 0.451 | - | | FALSE |
| 3591 | 0.635 | Yes | | FALSE |
| 3606 | 0.683 | Yes | | FALSE |
| 3708 | 0.569 | Yes | | FALSE |
| 3973 | 0.479 | - | | FALSE |
| 4060 | 0.448 | - | | FALSE |
| 4109 | 0.577 | Yes | | TRUE |
| 4185 | 0.428 | - | | FALSE |
| 4207 | 0.543 | Yes | | FALSE |
| 4359 | 0.351 | - | | FALSE |
| 4376 | 0.757 | Yes | | TRUE |
| 4452 | 0.196 | - | | FALSE |
| 4476 | 0.218 | - | | FALSE |
| 4487 | 0.076 | - | | TRUE |

Table S1. The output file from NetStart1.0 showing predicted start sites in the HER2 mRNA. Position represents the nucleotide position of the A in an AUG with potential to be a start site. Score represents the likeliness of an AUG being a functional start codon with scores greater than 0.5 being AUGs which are likely to be functional start codons. Pred is a boolean value with yes having a score greater than 0.5 and having a score less than 0.5. In frame as a boolean value showing if the AUG being interrogated is in frame with the canonical full length HER2 start site.

Supplemental Figure S1. Absolute luciferase activity of bicistronic luciferase reporters containing 1000 bp fragments upstream of the AUG codon encoding M611, M687 and M774, as well as two control constructs containing 1000 bp fragments of HER2 mRNA upstream of the AUG codons encoding M347 and M916.

