

Supplementary Materials:

Cancer Vaccines Co-Targeting HER2/Neu and IGF1R

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Optimized sequence of the murine IGF1R gene

Optimized Sequence: Length: 4316, GC%: 50.65, Minimum Free Energy: 1519.80

AGTGAGGACTGAGTTGGAGACTTTTTTTTTCTTTTTTCTTTTTCTTTTTTTTTTTTTTTTTCTAT
TTTTGAGAAAAGGGAATTCGTCCCAAATAAAAGGAGCCACCATGAAGAGTGGAAAGTGGTG
GAGGTAGCCCTACCAGTCTCTGGGGGCTGGTGTTCGTGTCAGCCGCTCTCAGCCTTTGGCCCA
CCTCCGGGGAGATCTGTGGCCCCGGAATCGATATCAGAAACGATTACCAGCAGCTGAAAAG
ACTGAAAATTGCACCGTCATTGAGGGCTTCTGCACATCCTGCTGATTTCCAAAGCTGAAG
ACTATAGGTCATATAGGTTCCCTAAACTGACCGTGATAACAGAGTATCTGCTTCTGTTTCGCG
TGGCCGGCCTGGAATCCCTGGGCGATCTGTTTCTAATCTCACAGTGATCAGAGGCTGGAAG
CTGTTCTACAACACTACGCTCTGGTTATTTTCGAAATGACTAACCTGAAGGACATAGGGCTCTAC
AACCTCAGGAACATCACCCGGGGCGCTATTTCGGATCGAGAAAATGCAGATCTGTGCTATCT
GTCTACCATTGATTGGTCACTGATTCTGGATGCTGTCTCTAATAATTACATCGTGGGAATAA
GCCCCCTAAAGAATGCGGGGACCTTTGTCCTGGCACACTCGAGGAGAAACCAATGTGTGAA
AAGACGACCATTAACAATGAGTATAACTATCGCTGTTGGACTACAAATAGATGCCAGAAGA
TGTGCCCTTCTGTGTGTGGGAAGCGCGCATGTACCGAAAATAATGAGTGTGTACCCCGAA
TGTCTTGGGTCTGTACACACCTGACGACAATACTACCTGTGTGCGCTGTAGGCATTATTAT
TATAAAGGAGTTTGTGTTCCAGCCTGCCCCCAGGGACTTATCGCTTTGAAGGCTGGCGGTGC
GTGGACAGAGACTTTTTCGCTAACATTCCAAACGCCGAGTCCAGTGACTCCGATGGTTTCGT
CATTGATGACGATGAATGTATGCAGGAATGCCCTAGCGGGTTTATACGGAACCTCTACCCAGT
CTATGTACTGTATTCCATGTGAAGGACCCTGTCCCAAAGTTTGTGGGGATGAAGAGAAGAAG
ACAAAGACCATTGACAGCGTGACCTCAGCCCAGATGTTGCAGGGATGTACGATTCTGAAGG
GAAATCTCCTCATCAACATTAGAAGGGGGAATAATATCGCAAGTGAAGTGGAAAACCTTTAT
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GACCCTGACAATGGTCGAGAATGATCACATCCGGGGAGCCAAGTCTGAAATTCTGTACATTA
GAACTAACGCTAGTGTCCCTAGTATCCCTCTCGACGTGCTGTCAGCCTCAACTCTTCCAGCC
AGCTGATCGTCAAATGGAACCCCCGACTCTTCCGAACGGGAATCTGTCTATTACATCGTG
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AAATTCCAATTAGGAAGTATGCAGATGGGACCATTGACGTGGAGGAGGTTACTGAGAACCC
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GCCGACGATATTCCCGGCCCGTTACCTGGGAACCGAGGCCCGAGAACTCTATCTTCTCAA
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AGGTGGAAGACCAGAGAGAATGTGTCTCCAGGCAAGAATACAGGAAGTATGGTGGGGCAA
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TATGCACCTCATTATTGCCCTCCCAGTTGCTATCCTCCTTATCGTGGGTGGACTGGTCATCATG
CTTTATGTCTTTACCCGGAAGCGCAACAATAGTAGACTGGGTAACGGCGTCTGTATGCTAGT
GTCAATCCGGAGTACTTTTCAGCAGCTGACGTCTACGTGCCTGATGAGTGGGAAGTGGCCCG
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AGCAGAACAATCTGGTCTGATACCCCTAGTCTGAGCAAGATGATTGAGATGGCCGGAGA
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GAAATTGCATGGTGGCTGAGGATTTACTGTGAAGATCGGAGACTTTGGCATGACAAGGGAC
ATCTACGAAACAGACTACTATCGCAAGGGAGGCAAAGGCCTGCTTCCAGTTCGGTGGATGA
GCCCCGAGTCACTGAAAGATGGTGTCTTACCACCCACTCAGATGTCTGGAGCTTTGGAGTG
GTCCTGTGGGAAATCGCCACCCTGGCTGAACAGCCATAACCAGGGCTTGTCCAACGAGCAGGT
TCTGCGATTTCGTATGGAGGGGGGCTCTTGGACAAGCCTGACAACTGCCCCGATATGCTGT
TCGAACTGATGAGAATGTGCTGGCAATACAACCCCAAGATGCGACCGTCTTTCTGGAGATA
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GGAAAACAACCTCCCGAGCCAGAGGAAGTGGAGATGGAGCCAGAGAATATGGAGTCAGT
TCCACTCGACCCTAGCGCCAGCAGTGCCTCACTCCCTCTCCCTGAACGACACAGTGGGCACA
AGGCAGAGAACGGCCAGGTCCGGGGGTTCTTGTGCTTAGAGCCTCTTTTGATGAGCGGCAG
CCATATGCACACATGAATGGGGGGAGAGCCAACGAGCGCGCTCTGCCTCTGCCACAGAGCT
CTACCTGCTGATCCTCGGACACACCGAAGCACGCGCCAACAGTAACGTGTGTGCGCCCACTC
GGTGGGCGGGGGGGCGGGGAGGGGAGAGCAGGTTGTAAACAATCTATTCA



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