MiSeq primers 070818:

**Trp53: (Exon5) with adaptors):**

Left: (#1)

ACACTGACGACATGGTTCTACTAGTTCCCCACCTTGACACC

Right: (#3)

TACGGTAGCAGAGACTTGGTCACAAATTTCCTTCCACCCGG

Band size: 378bp (+42bp w/ adaptors)

**PTEN2 primers: (Exon 5) with adaptors)**

Left Alternative Primer:

ACACTGACGACATGGTTCTACGTTGCACAGTATCCTTTTGAAGA

Right: (#6)

TACGGTAGCAGAGACTTGGTCCAGCTTACCTTTTTGTCTCTGG

Band size: 248bp (+42bp w/ adaptors)

**PTEN3 primers: (Exon 7) with adaptors**

Left: (#3)

ACACTGACGACATGGTTCTACAAGAAGTCCTTACATGGGTTGG

Alternative Right primer:

TACGGTAGCAGAGACTTGGTCTGGCTGAGGGAACTCAAAGT

Band size: 290bp (+42bp w/ adaptors)

**BRCA1 (Exon 6) with adaptors**

Alternative left primer:

ACACTGACGACATGGTTCTACTTGTGAGCGTTTGAATGAGG

Right: (#2)

TACGGTAGCAGAGACTTGGTCCACACCAGATCCCCTGACTT

277bp (+42bp w/ adaptors)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **sgRNA** | **Exon #** | **Quality Score** | **Seq. Scan Score** | **Sequence (PAM)** |
| Trp 53 sgRNA #2 | 5 | 65 | 0.5926 | CATCGGAGCAGCGCTCATGGTGG |
| Trp 53 sgRNA #3 | 5 | 44 (Chop chop) | 0.8054 | CGGAGCAGCGCTCATGGTGGGGG |
| PTEN sgRNA #2 (Ex 5) | 5 | 79 | 0.394 | TGTGCATATTTATTGCATCGGGG |
| PTEN sgRNA #3 (Ex 7) | 7 | #5 | 0.6911 | AGCTGGCAGACCACAAACTGAGG |
| BRCA1 sgRNA #1 | 6 | MIT Score = 93 | 0.7279 | GCGTCGATCATCCAGAGCGTGGG |
| BRCA1 sgRNA #2 | 6 | MIT Score = 89 | 0.7254 | GCTACCGGAACCGTGTCAGAAGG |

LEFT PRIMER RIGHT PRIMER TARGET REGION

**P53:**

TAGTTCCCCACCTTGACACCTGATCGTTACTCGGCTTGTCCCCGACCTCCGTTCTCTCTCCTCTCTTCCAGTACTCTCCTCCCCTCAATAAGCTATTCTGCCAGCTGGCGAAGACGTGCCCTGTGCAGTTGTGGGTCAGCGCCACACCTCCAGCTGGGAGCCGTGTCCGCGCCATGGCCATCTACAAGAAGTCACAGCACATGACGGAGGTCGTGAGACGCTGCCCCCACCATGAGCGCTGCTCCGATGGTGATGGTAAGCCCTCAACACCGCCTGTGGGGTTAGGACTGGCAGCCTCCCATCTCCCGGCTTCTGACTTATTCTTGCTCTTAGGCCTGGCTCCTCCCCAGCATCTTATCCGGGTGGAAGGAAATTTGT

**PTEN 2:**

GTTGCACAGTATCCTTTTGAAGACCATAACCCACCACAGCTAGAACTTATCAAACCCTTCTGTGAAGATCTTGACCAATGGCTAAGTGAAGATGACAATCATGTTGCAGCAATTCACTGTAAAGCTGGAAAGGGACGGACTGGTGTAATGATTTGTGCATATTTATTGCATCGGGGCAAATTTTTAAAGGCACAAGAGGCCCTAGATTTTTATGGGGAAGTAAGGACCAGAGACAAAAAGGTAAGCTGG

**PTEN3:**

AAGAAGTCCTTACATGGGTTGGTTATGTTTTTACATATTTTATTTCTACTGATTTGTTTTAGATAAGCAGTCAATATGAAGAGTTATCATTTTGTGTATATTTCTGTTTATTTTATCATTAAAGTAGTTTTTGATAAGTTGAAGACATTTCTTGTGAAATGATCCTATATGTATTTAACCACACAGATCCTCAGTTTGTGGTCTGCCAGCTAAAGGTGAAGATATATTCCTCCAATTCAGGACCCACGCGGCGGGAGGACAAGTTCATGTACTTTGAGTTCCCTCAGCCA

**BRCA1:**

TTGTGAGCGTTTGAATGAGGAGGCGTCGATCATCCAGAGCGTGGGCTACCGGAACCGTGTCAGAAGGCTTCCCCAGGTCGAACCTGGAAATGCCACCTTGGTAAAGCTGCTTTCCACGTTTTTTTCTGCCGTCTCTTTATTGAGTCTTAGTGAGTTAGTGAGTGTGTGGATCTATATAAGAACTTAGTAGAGAGAGGATGGTGATTGTACATTTAGTGGCTGGACAAGTGTTCTAATAAGTAAGAATTAAATTCAGAAAGTCAGGGGATCTGGTGTG