

A

Gene Name	Cell Line	Amplicon size bp	alignment		Gaps
MUC4-All Forward	CCD841	210bp	MUC4-All - CCD841 Amplicon Forward MUC4-All Isoforms	1 10 20 30 40 50 60 70 80 16,040 CTGGTCTA-AGCCCCAGAGCGGCTTACCTGCGTGTCCTCAAGTGCAGTAGGGGCTACTGTGACCATGGAGGCCAGTGCCAGCACCTGCC 89 16,128 16040 CTGGTCTACAGCCCCAGAGCGGCTTACCTGCGTGTCCTC-GTGCAGTAGGGGCTACTGTGACCATGGAGGCCAGTGCCAGCACCTGCC	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0
			MUC4-All - CCD841 Amplicon Forward MUC4-All Isoforms	90 100 110 120 130 140 150 160 170 16,129 CAGTGGGCCCCGCTGCAGCTGTGTGTCCTTCTCCATCTACACGGCTGGGGCGAGCACTGTGAGCACCTGAGCATGAAACTCGAC 174 16,213 16130 16140 16150 16160 16170 16180 16190 16200 16210	Length: 175 Identity: 173 / 175 ( 98.86% ) Gaps: 2 / 175 ( 1.14% )
MUC4-All Reverse	CCD841	210bp	MUC4-All - CCD841 Amplicon Reverse MUC4-All Isoforms	1 10 20 30 40 50 60 70 80 90 100 16,004 GCTTACTTCAGATGCGATGGCTACAAGGGCTACGACCTGGTCTACAGCCCCAGAGCGGCTTACCTGCGTGTCCTCAAGTGCAGTAGGGGCTACTGTGACC 100 16,103 16010 16020 16030 16040 16050 16060 16070 16080 16090 16100	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0
			MUC4-All - CCD841 Amplicon Reverse MUC4-All Isoforms	101 110 120 130 140 150 160 170 16,104 ATGGAGGCCAGTGCCAGCACCTGCCAGTGGGCCCCGCTGCAGCTGTGTGTCCTTCTCCATCTACACGGCT 172 16,175 16110 16120 16130 16140 16150 16160 16170	Length: 172 Identity: 171 / 172 ( 99.42% ) Gaps: 0 / 172 ( 0.00% )
MUC4-All Forward	SW480	210bp	MUC4-All - SW480 Amplicon Forward MUC4-All Isoforms	1 10 20 30 40 50 60 70 80 90 16,052 CCCCAGAGCGGCTTACCTGCGTGTCCTCCGTCAGTAGGGGCTACTGTGACCATGGAGGCCAGTGCCAGCACCTGCCAGTGGGCCCCGC 90 16,141 16060 16070 16080 16090 16100 16110 16120 16130 16140	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0
			MUC4-All - SW480 Amplicon Forward MUC4-All Isoforms	91 100 110 120 130 140 150 160 16,142 TGCAGCTGTGTGTCCTTCTCCATCTACACGGCTGGGGCGAGCACTGTGAGCACCTGAGCATGAAACTCGAC 162 16,213 16150 16160 16170 16180 16190 16200 16210	Length: 162 Identity: 162 / 162 ( 100.00% ) Gaps: 0 / 162 ( 0.00% )
MUC4-All Reverse	SW480	210bp	MUC4-All - SW480 Amplicon Reverse MUC4-All Isoforms	1 10 20 30 40 50 60 70 80 90 100 16,004 GCTTACTTCAGATGCGATGGCTACAAGGGCTACGACCTGGTCTACAGCCCCAGAGCGGCTTACCTGCGTGTCCTCCGTCAGTAGGGGCTACTGTGACC 100 16,103 16010 16020 16030 16040 16050 16060 16070 16080 16090 16100	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0
			MUC4-All - SW480 Amplicon Reverse MUC4-All Isoforms	101 110 120 130 140 150 160 170 16,104 ATGGAGGCCAGTGCCAGCACCTGCCAGTGGGCCCCGCTGCAGCTGTGTGTCCTTCTCCATCTACACGGCT 172 16,175 16110 16120 16130 16140 16150 16160 16170	Length: 172 Identity: 172 / 172 ( 100.00% ) Gaps: 0 / 172 ( 0.00% )
MUC4-All Forward	SW620	210bp	MUC4-All - SW620 Amplicon Forward MUC4-All Isoforms	1 10 20 30 40 50 60 70 80 90 100 16,051 CCCCAGAGCGGCTTACCTGCGTGTCCTCCGTCAGTAGGGGCTACTGTGACCATGGAGGCCAGTGCCAGCACCTGCCAGTGGGCCCCGCTGCAGCTGT 100 16,150 16060 16070 16080 16090 16100 16110 16120 16130 16140 16150	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0
			MUC4-All - SW620 Amplicon Forward MUC4-All Isoforms	101 110 120 130 140 150 160 16,151 GTGTCTTCTCCATCTACACGGCTGGGGCGAGCACTGTGAGCACCTGAGCATGAAACTCGAC 163 16,213 16160 16170 16180 16190 16200 16210	Length: 163 Identity: 163 / 163 ( 100.00% ) Gaps: 0 / 163 ( 0.00% )
MUC4-All Reverse	SW620	210bp	MUC4-All - SW620 Amplicon Reverse MUC4-All Isoforms	1 10 20 30 40 50 60 70 80 90 100 16,004 GCTTACTTCAGATGCGATGGCTACAAGGGCTACGACCTGGTCTACAGCCCCAGAGCGGCTTACCTGCGTGTCCTCCGTCAGTAGGGGCTACTGTGACC 100 16,103 16010 16020 16030 16040 16050 16060 16070 16080 16090 16100	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0
			MUC4-All - SW620 Amplicon Reverse MUC4-All Isoforms	101 110 120 130 140 150 160 170 16,104 ATGGAGGCCAGTGCCAGCACCTGCCAGTGGGCCCCGCTGCAGCTGTGTGTCCTTCTCCATCTACA-CCGCTGG 175 16,177 16110 16120 16130 16140 16150 16160 16170	Length: 175 Identity: 174 / 175 ( 99.43% ) Gaps: 1 / 175 ( 0.57% )

B

Gene Name	Cell Line	Amplicon size bp	alignment		Gaps	
MUC4-16 Forward	CCD841	223bp	MUC4-16 - CCD841 Amplicon Forward MUC4-16 Isoforms	1                   10                   20                   30                   40                   50                   60                   70                   80                   90                   100 1880 ATAAAAACGGCCACATCCCCATCTTCTTCACCTATGCTGGATAGACACACATCAACAACAAATTACAACGGGCACCATCAACAAATCATTCAACAATACATT 1979 1880                   1890                   1900                   1910                   1920                   1930                   1940                   1950                   1960                   1970	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-16 - CCD841 Amplicon Forward MUC4-16 Isoforms	101                   110                   120                   130                   140                   150                   160                   170 1980 CCACAAGCACCTCTCCTCAGGAATCACCAGCTGTTTCCCAAAGGGGTACACTCAAGCCCCGCAGACCACACAAGAATC 179 1980                   1990                   2000                   2010                   2020                   2030                   2040                   2050 1980 CCACAAGCACCTCTCCTCAGGAATCACCAGCTGTTTCCCAAAGGGGTACACTCAAGCCCCGCAGACCACACAAGAATC 2058	Length: 179 Identity: 178 / 179 ( 99.44% ) Gaps: 0 / 179 ( 0.00% )	
MUC4-16 Reverse	CCD841	223bp	MUC4-16 - CCD841 Amplicon Reverse MUC4-16 Isoforms	1                   10                   20                   30                   40                   50                   60                   70                   80                   90                   100 1834 TGGAGAGGCTCTTCTCAGCAGCCCAAGCTACAGTGTGACTCAGATGATAAAAAACGGCCACATCCCCATCTTCTTCACCTATGCTGGATAGACACACATCA 100 1840                   1850                   1860                   1870                   1880                   1890                   1900                   1910                   1920                   1930	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-16 - CCD841 Amplicon Reverse MUC4-16 Isoforms	101                   110                   120                   130                   140                   150                   160                   170 1934 CAACAAATTACAACGGCACCATTCAACAAATCATTTCAACAATACATTTCCACAAGCACCTCTCCTCAGGAATCACCAGCTG 179 1940                   1950                   1960                   1970                   1980                   1990                   2000                   2010 1934 CAACAAATTACAACGGCACCATTCAACAAATCATTTCAACAATACATTTCCACAAGCACCTCTCCTCAGGAATCACCAGCTG 2012	Length: 179 Identity: 178 / 179 ( 99.44% ) Gaps: 0 / 179 ( 0.00% )	
MUC4-16 Forward	SW480	223bp	MUC4-16 - SW480 Amplicon Forward MUC4-16 Isoforms	1                   10                   20                   30                   40                   50                   60                   70                   80                   90                   100 1883 AAAACGGCCACATCCCCATCTTCTTCACCTATGCTGGATAGACACACATCAACAACAAATTACAACGGGCACCATCAACAAATCATTCAACAATACATTCCA 100 1890                   1900                   1910                   1920                   1930                   1940                   1950                   1960                   1970                   1980	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-16 - SW480 Amplicon Forward MUC4-16 Isoforms	101                   110                   120                   130                   140                   150                   160                   170 1983 CAAGCACCTCTCCTCAGGAATCACCAGCTGTTTCCCAAAGGGGTACACTCAAGCCCCGCAGACCACACAAGAAT 175 1990                   2000                   2010                   2020                   2030                   2040                   2050 1983 CAAGCACCTCTCCTCAGGAATCACCAGCTGTTTCCCAAAGGGGTACACTCAAGCCCCGCAGACCACACAAGAAT 2057	Length: 175 Identity: 174 / 175 ( 99.43% ) Gaps: 0 / 175 ( 0.00% )	
MUC4-16 Reverse	SW480	223bp	MUC4-16 - SW480 Amplicon Reverse MUC4-16 Isoforms	1                   10                   20                   30                   40                   50                   60                   70                   80                   90                   100 1834 TGGAGAGGCTCTTCTCAGCAGCCCAAGCTACAGTGTGACTCAGATGATAAAAAACGGCCACATCCCCATCTTCTTCACCTATGCTGGATAGACACACATCA 100 1840                   1850                   1860                   1870                   1880                   1890                   1900                   1910                   1920                   1930	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-16 - SW480 Amplicon Reverse MUC4-16 Isoforms	101                   110                   120                   130                   140                   150                   160                   170 1934 CAACAAATTACAACGGCACCATTCAACAAATCATTTCAACAATACATTTCCACAAGCACCTCTCCTCAGG 167 1940                   1950                   1960                   1970                   1980                   1990                   2000 1934 CAACAAATTACAACGGCACCATTCAACAAATCATTTCAACAATACATTTCCACAAGCACCTCTCCTCAGG 2000	Length: 167 Identity: 166 / 167 ( 99.40% ) Gaps: 0 / 167 ( 0.00% )	
MUC4-16 Forward	SW620	223bp	MUC4-16 - SW620 Amplicon Forward MUC4-16 Isoforms	9                   10                   20                   30                   40                   50                   60                   70                   80                   90                   100 1869 TGACTCAGATGATAAAAAACGGCCACATCCCCATCTTCTTCACCTATGCTGGATAGACACACATCAACAACAAATTACAACGGGCACCATCAACAAATCATTC 108 1870                   1880                   1890                   1900                   1910                   1920                   1930                   1940                   1950                   1960	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-16 - SW620 Amplicon Forward MUC4-16 Isoforms	109                   110                   120                   130                   140                   150                   160                   170                   180                   190 1969 CAAATCATTTCAACAATACATTTCCACAAGCACCTCTCCTCAGGAATCACCAGCTGTTTCCCAAAGGGGTACACTCAAGCCCCGCAGACCA 198 1970                   1980                   1990                   2000                   2010                   2020                   2030                   2040                   2050 1969 CAAATCATTTCAACAATACATTTCCACAAGCACCTCTCCTCAGGAATCACCAGCTGTTTCCCAAAGGGGTACACTCAAGCCCCGCAGACCA 2058	Length: 190 Identity: 189 / 190 ( 99.47% ) Gaps: 0 / 190 ( 0.00% )	
MUC4-16 Reverse	SW620	223bp	MUC4-16 - SW620 Amplicon Reverse MUC4-16 Isoforms	1                   10                   20                   30                   40                   50                   60                   70                   80                   90                   100 1834 TGGAGAGGCTCTTCTCAGCAGCCCAAGCTACAGTGTGACTCAGATGATAAAAAACGGCCACATCCCCATCTTCTTCACCTATGCTGGATAGACACACATCA 100 1840                   1850                   1860                   1870                   1880                   1890                   1900                   1910                   1920                   1930	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-16 - SW620 Amplicon Reverse MUC4-16 Isoforms	101                   110                   120                   130                   140                   150                   160                   170 1934 CAACAAATTACAACGGCACCATTCAACAAATCATTTCAACAATACATTTCCACAAGCACCTCTCCTCAGGAATCACCAGCTG 179 1940                   1950                   1960                   1970                   1980                   1990                   2000                   2010 1934 CAACAAATTACAACGGCACCATTCAACAAATCATTTCAACAATACATTTCCACAAGCACCTCTCCTCAGGAATCACCAGCTG 2012	Length: 179 Identity: 178 / 179 ( 99.44% ) Gaps: 0 / 179 ( 0.00% )	

C

Gene Name	Cell Line	Amplicon size bp	alignment		Gaps	
MUC4-4 Forward	CCD841	158bp	MUC4-4 - CCD841 Amplicon Forward	1 10 20 30 40 50 60 70 80 87 TGAAGGGGGCACTGGACGTGGGTCCCTGGGTGTCCCTGAGCTGCCTGTGTCTCTGCCCTCCGCAATGTGGTCCCAGGAATCA 200 114 TGAAGGGGGCACTGGAGGAGGGTCCCTGGGTGTCCCTGAGCTGCCTGTGTCTCTGCCCTCCGCAATGTGGTCCCAGGAATGA 200	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-4 Isoform	120 130 140 150 160 170 180 190 200	Length: 87 Identity: 83 / 87 ( 95.40% ) Gaps: 0 / 87 ( 0.00% )	
MUC4-4 Reverse	CCD841	158bp	MUC4-4 - CCD841 Amplicon Reverse	1 10 20 30 40 50 60 70 80 90 100 GTCTGCTCCTCACACTGCAAGCTGTGGGCCGTGGAAGCTTCCCTAGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGGCACGCTGGAGGAGGGTCC 100 41 GTCTGCTCCTCACACTGCAAGCTGTGGGCCGTGGAAGCTTCCCTAGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGGCACGCTGGAGGAGGGTCC 140	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-4 Isoform	110 120 123 141 150 160 101 CCTGGGTGTCCCTGAGCTGCC 123 141 CCTGGGTGTCCCTGAGCTGCC 163	Length: 123 Identity: 122 / 123 ( 99.19% ) Gaps: 0 / 123 ( 0.00% )	
MUC4-4 Forward	SW480	158bp	MUC4-4 - SW480 Amplicon Forward	1 10 20 30 40 50 60 70 80 90 100 CCCAGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGGCACGCTGGAGGAGGGTCCCTGGGTGTCCCTGAGCTGCCTGTGTCTCTGCCCTCTTCC 100 81 CCCAGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGGCACGCTGGAGGAGGGTCCCTGGGTGTCCCTGAGCTGCCTGTGTCTCTGCCCTCTTCC 180	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-4 Isoform	90 100 110 120 130 140 150 160 170 180 101 GCATGTGGTCCCAGGAAT 118 181 GCATGTGGTCCCAGGAAT 198	Length: 118 Identity: 118 / 118 ( 100.00% ) Gaps: 0 / 118 ( 0.00% )	
MUC4-4 Reverse	SW480	158bp	MUC4-4 - SW480 Amplicon Reverse	1 10 20 30 40 50 60 70 80 90 100 GTCTGCTCCTCACACTGCAAGCTGTGGGCCGTGGAAGCTTCCCCAGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGGCACGCTGGAGGAGGGTCC 100 41 GTCTGCTCCTCACACTGCAAGCTGTGGGCCGTGGAAGCTTCCCCAGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGGCACGCTGGAGGAGGGTCC 140	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-4 Isoform	110 120 120 141 150 160 101 CCTGGGTGTCCCTGAGCTGC 120 141 CCTGGGTGTCCCTGAGCTGC 160	Length: 120 Identity: 120 / 120 ( 100.00% ) Gaps: 0 / 120 ( 0.00% )	
MUC4-4 Forward	SW620	158bp	MUC4-4 - SW620 Amplicon Forward	1 10 20 30 40 50 60 70 80 90 100 AGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGGCACGCTGGAGGAGGGTCCCTGGGTGTCCCTGAGCTGCCTGTGTCTCTGCCCTCTTCCGCA 100 84 AGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGGCACGCTGGAGGAGGGTCCCTGGGTGTCCCTGAGCTGCCTGTGTCTCTGCCCTCTTCCGCA 183	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-4 Isoform	90 100 110 120 130 140 150 160 170 180 101 TGTGGTCCCAGGAAT 115 184 TGTGGTCCCAGGAAT 198	Length: 115 Identity: 115 / 115 ( 100.00% ) Gaps: 0 / 115 ( 0.00% )	
MUC4-4 Reverse	SW620	158bp	MUC4-4 - SW620 Amplicon Reverse	1 10 20 30 40 50 60 70 80 90 100 GTCTGCTCCTCACACTGCAAGCTGTGGGCCGTGGAAGCTTCCCCAGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGGCACGCTGGAGGAGGGTCC 100 41 GTCTGCTCCTCACACTGCAAGCTGTGGGCCGTGGAAGCTTCCCCAGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGGCACGCTGGAGGAGGGTCC 140	Matrix: DNAFULL Gap open penalty: 10.0 Gap extend penalty: 1.0	
			MUC4-4 Isoform	110 120 121 141 150 160 101 CCTGGGTGTCCCTGAGCTGCC 121 141 CCTGGGTGTCCCTGAGCTGCC 161	Length: 121 Identity: 121 / 121 ( 100.00% ) Gaps: 0 / 121 ( 0.00% )	