

Genbank	CTGCTCTTATACCAGGCAATGTACACGTCTGAGAAACCCTTGCCCCAGACAGCCGTTTTA	-762
ES-2	CTGCTCTTATACCAGGCAATGTACACGTCTGAGAAACCCTTGCCCCAGACAGCCGTTTTA	
SKOV3	CTGCTCTTATACCAGGCAATGTACACGTCTGAGAAACCCTTGCCCCAGACAGCCGTTTTA	

Genbank	CACGCAGGAGGGGAAGGGGAGGGGAAGGAGAGAGCAGTCCGACTCTCCAAAAGGAATCCT	-702
ES-2	CACGCAGGAGGGGAAGGGGAGGGGAAGGAGAGAGCAGTCCGACTCTCCAAAAGGAATCCT	
SKOV3	CACGCAGGAGGGGAAGGGGAGGGGAAGGAGAGAGCAGTCCGACTCTCCAAAAGGAATCCT	

Genbank	TTGAACTAGGGTTTCTGACTTAGTGAACCCCGCGCTCCTGAAAATCAAGGGTTGAGGGGG	-642
ES-2	TTGAACTAGGGTTTCTGACTTAGTGAACCCCGCGCTCCTGAAAATCAAGGGTTGAGGGGG	
SKOV3	TTGAACTAGGGTTTCTGACTTAGTGAACCCCGCGCTCCTGAAAATCAAGGGTTGAGGGGG	

Genbank	TAGGGGGACACTTTCTAGTCGTACAGGTGATTCGATTCTCGGTGGGGCTCTCACAATA	-582
ES-2	TAGGGGGACACTTTCTAGTCGTACAGGTGATTCGATTCTCGGTGGGGCTCTCACAATA	
SKOV3	TAGGGGGACACTTTCTAGTCGTACAGGTGATTCGATTCTCGGTGGGGCTCTCACAATA	

Genbank	GGAAAGAATAGTTTGGCTTTTCTTATGATTAAGAAGAAGCCATACTTCCCTATGAC	-522
ES-2	GGAAAGAATAGTTTGGCTTTTCTTATGATTAAGAAGAAGCCATACTTCCCTATGAC	
SKOV3	GGAAAGAATAGTTTGGCTTTTCTTATGATTAAGAAGAAGCCATACTTCCCTATGAC	

Genbank	ACCAAACACCCGATTCAATTTGGCAGTTAGGAAGTTGTATCGCGGAGGAAGGAAACGG	-462
ES-2	ACCAAACACCCGATTCAATTTGGCAGTTAGGAAGTTGTATCGCGGAGGAAGGAAACGG	
SKOV3	ACCAAACACCCGATTCAATTTGGCAGTTAGGAAGTTGTATCGCGGAGGAAGGAAACGG	

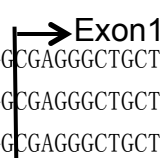
Genbank	GGCGGGGCGGATTTCTTTTAAACAGAGTGAACGCACTCAAACACGCCTTTGCTGGCAGG	-402
ES-2	GGCGGGGCGGATTTCTTTTAAACAGAGTGAACGCACTCAAACACGCCTTTGCTGGCAGG	
SKOV3	GGCGGGGCGGATTTCTTTTAAACAGAGTGAACGCACTCAAACACGCCTTTGCTGGCAGG	

Genbank	CGGGGAGCGCGGCTGGGAGCAGGAGGCCGAGGGCGGTGTGGGGGCAGGTGGGAGG	-342
ES-2	CGGGGAGCGCGGCTGGGAGCAGGAGGCCGAGGGCGGTGTGGGGGCAGGTGGGAGG	
SKOV3	CGGGGAGCGCGGCTGGGAGCAGGAGGCCGAGGGCGGTGTGGGGGCAGGTGGGAGG	

Genbank	AGCCAGTCTCCTTCCTTGCCAACGCTGGCTCTGGCGAGGGCTGCTTCCGGCTGGTGCC	-282
ES-2	AGCCAGTCTCCTTCCTTGCCAACGCTGGCTCTGGCGAGGGCTGCTTCCGGCTGGTGCC	
SKOV3	AGCCAGTCTCCTTCCTTGCCAACGCTGGCTCTGGCGAGGGCTGCTTCCGGCTGGTGCC	

Genbank	CCCGGGGAGACCCAACCTGGGGCGACTTCAGGGGTGCCACATTCGCTAAGTGCTCGGAG	-222
ES-2	CCCGGGGAGACCCAACCTGGGGCGACTTCAGGGGTGCCACATTCGCTAAGTGCTCGGAG	
SKOV3	CCCGGGGAGACCCAACCTGGGGCGACTTCAGGGGTGCCACATTCGCTAAGTGCTCGGAG	

Genbank	TTAATAGCACCTCCTCCGAGCACTCGCTCACAGCGTCCCCTTGCTTGAAAGATACCGCG	-162
ES-2	TTAATAGCACCTCCTCCGAGCACTCGCTCACAGCGTCCCCTTGCTTGAAAGATACCGCG	
SKOV3	TTAATAGCACCTCCTCCGAGCACTCGCTCACAGCGTCCCCTTGCTTGAAAGATACCGCG	



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Genbank      GTCCCTCCAGAGGATTTGAGGGACAGGGTCGGAGGGGGCTCTCCGCCAGCACCGGAGGA -102
ES-2        GTCCCTCCAGAGGATTTGAGGGACAGGGTCGGAGGGGGCTCTCCGCCAGCACCGGAGGA
SKOV3       GTCCCTCCAGAGGATTTGAGGGACAGGGTCGGAGGGGGCTCTCCGCCAGCACCGGAGGA
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                Sall2 transcription
                factor binding site

Genbank      AGAAAGAGGAGGGGCTGGCTGGTCACCAGAGGGTGGGCGCGACCGCGTGCCTCGGCGGC -42
ES-2        AGAAAGAGGAGGGGCTGGCTGGTCACCAGAGGGTGGGCGCGACCGCGTGCCTCGGCGGC
SKOV3       AGAAAGAGGAGGGGCTGGCTGGTCACCAGAGGGTGGGCGCGACCGCGTGCCTCGGCGGC
*****

                                +1
Genbank      TCGGAGAGGGGAGAGCAGGCAGCGGGCGGCGGGAGCAGCATGGAGCCGGCGGCGGGG 18
ES-2        TCGGAGAGGGGAGAGCAGGCAGCGGGCGGCGGGAGCAGCATGGAGCCGGCGGCGGGG
SKOV3       TCGGAGAGGGGAGAGCAGGCAGCGGGCGGCGGGAGCAGCATGGAGCCGGCGGCGGGG
*****

Genbank      AGCAGCATGGAGCCTTCGGCTGACTGGCTGGCCACGGCCGCGGCCGGGGTCGGGTAGAG 78
ES-2        AGCAGCATGGAGCCTTCGGCTGACTGGCTGGCCACGGCCGCGGCCGGGGTCGGGTAGAG
SKOV3       AGCAGCATGGAGCCTTCGGCTGACTGGCTGGCCACGGCCGCGGCCGGGGTCGGGTAGAG
*****

Genbank      GAGGTGCGGGCGCTGCTGGAGGGGGGGCGCTGCCAACGCACCGAATAGTTACGGTCGG 138
ES-2        GAGGTGCGGGCGCTGCTGGAGGGGGGGCGCTGCCAACGCACCGAATAGTTACGGTCGG
SKOV3       GAGGTGCGGGCGCG-----
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Exon1 ←
Genbank      AGGCCGATCCAGGTGGGTAGAGGGTCTGCAGCGGGAGCAGGGGATGGCGGGCGACTCTGG 198
ES-2        AGGCCGATCCAGGTGGGTAGAGGGTCTGCAGCGGGAGCAGGGGATGGCGGGCGACTCTGG
SKOV3       ----CGATCAAGGTGGGTAGAGGGTCTGCAGCGGGAGCAGGGGATGGCGGGCGACTCTGG
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Doc. S1. Comparison of p16 sequences by Clustalw2. We have obtained PCR fragments of p16 promoter and exon1 region from SKOV3 and ES-2 cells. The p16 sequences from SKOV3 and ES-2 cells are compared with the Genbank database sequence with the A of first ATG counted as +1. Either SKOV3 or ES-2 p16 gene sequence has mutation in the p16 proximal promoter region sequenced. The same is true for the first 405 bases of p16 exon1. However, A 50 bp deletion (93 to 142) and two single base mutations (92 and 148) exist near the 3' end of the exon1 of p16 gene in SKOV3 cells. The A of ATG is +1(black box). Exon1: -306 to 149. Sall2 transcription factor-binding site (GGGTGGG, red box): from -66 to -72.