

a, Bioinformatic Analysis of the *TsVP1* Promoter

-2200 AA GATTTGTCTAC **CTCCC**ATTAC GCCAAAAATA ATTTTAAAAA ATCATCTAGA
Sp1

-2148 TAT **TATACGT TTT**CTAGATA CCAATAAAGT ATCTGACATG AATAAAAGAA TAAATAAAGG
ACE

-2088 ACCACATGTT CTTA AAAAATA TAACTCACAT CAATAAATCA AATAATTCAA CATTTTACCT

-2028 TTAAAC**ATAG AAATGAA**CCA TCCGTGACTT TTATCAAAAT AAATATATTT CTATGAAGAA
AT-rich element

-1968 CAATAGTTCG TCCATATATT TC**AAGTTTTCT**ACGAATCTTA TTAAGATAGA TTGTACTGGT
AE-box

-1908 CACCGTTTTA TGGCATTITTG TCAATATATA AAAGATTATA AACATAGAGG TATCACCAAA

-1848 TTTTG GTG**AG GCTTTGATTG**CCTTAATTAG AAAACAATAT AATTACGACA GCGACGATCA
AAAC-motif

-1788 TCTAATCATG TCACGGAAAG TCGGAATTGT TACCGTGTA AATCATCCGC TTCTTTCTTA

-1728 ATT**CAATTAT TG**TTACTTTA ATTAGTTGGA T**TGGTTTG**GAA TTCTACGTTT ACACCTCTGC
HD-Zip 1 ARE

-1668 ATTTGGATAA CCTATGCCAT ATAGTATTGA TTATA**TAACT G**ATAACTAAG GGAAC**TAAAA**
MBS

-1608 **TACT**AAATCT TGACTGAAAG ATAATAAGAG AAGTCTCTAG TCCCTAATGT CAGCCACATA
AT-rich sequence

-1548 CCTAGGAAAG ATTTTTTAGT TTTTCAT**TACG TG**GTAAATTT TCCAGATTGA TTAGCAACCT
ABRE G-BOX

-1488 GCAAAAAGG GAACAAGA**GG GAGG**AAGATA AAGCATGAGT GGTC ACTACT CACTCACTGA

-1428 TACTACAAGA **AATTAATTAA TG**CTAACAAA **AATCCACA**AT **A TAAATTTTT** AATTAAGATA
Sp1

-1368 TTT**TTTCAAA** AGAGTATTTA TCCGATTGGA GGGTTGCACA CCATTCAATA CAC**ATTAAT**A
Box I Box 4

-1308 **CGTCA**CAGCC GCTCGAAAAG GCCTCCGCTA TATAT**CCATC TTTTT**GCTAA AGA**ATTTTTT**
CGTCA-motif TCA-element HSE

-1248 **TTT**TCGAAGA ATCATCAATT TACTTTATTC TTGGTCTGAG GAAATATCT**A TATACGTGAA**
G-BOX

-1188 **GT**GTGCACCT TATCTTG TAC AGGGCTTCCT TCGGAAAAA AAAAAATCTT GTACAGGGCT
chs-CMA2c

-1128 TCCCTCGTAT GAAGAAGAGA TAAACTCGTA AAAAGGTTTT GGAATCCAAC TTAATGGAAC

-1068 AAATGCCAAA ATAATTTAGT ACAACGTCGA ATCAAGTTGC GAAAGTACTG TAGAATCGAT

-1008 TCCTATAC**AG AGACGAAA**CG AGTTCTTATT GCACTTTATA ATATTGATTA AAAACT**GAAA**
5UTR Py-rich stretch

-948 **CTTTTT**TTGT TTCTCCGAAT ATTGTTATCT TTATTTTACA GCTAGATATC AATCCGCACA
HSE

-888 TGCATATAAT TAGTTTATCT TTTTCAAAAA AAGTATATCC CCAAATAAAA TCC**CACGTAA**
ABRE G-BOX

-828 ATGAAAACAC AGTTTTAATT TTTTTTTCAT AGTGTTTACG ATAATACACA **TGGTTT**GTTG
ARE

-768 TAATT**AAAAA GATA**GATACG GTTTTTTTTC AACTGAAAAT TTGACTTTGT ATTTATCCTA
TCA-element

-708 ATGATATCAA ATGAT**TTAAC** CATATCCATA TCTGATAGTA TGC**CACACA** **TTGAA**TCCCT

	GT1-motif	G-BOX
-648	CATTGAAAAT TA <u>TGACG</u> AGC TGAGATTCAA TGATATTAGT TAGTC <u>CATAT ACAC</u> TGGATT	
	CGTCA-motif	Box III
-588	TG <u>GTAAGAAT AC</u> CATTACTG TATAAACT CGAATATACC ATGGATAAGC ATAAGATTCA	
	TC-rich repeats	
-528	CCTA <u>ATTAAT TAAT</u> TTCCAC CAGTGAGAAA AAAAGGAAAA CTA <u>ATTAAT</u> T TCTA <u>CACGTA</u>	
	Box 4	Box 4 G-BOX
-468	GACAATTGAC TACGAATCAA AAAGAGCGCT AATCGTGTAC CTGACAGTC <u>G GACGG</u> ACACA	
		A-box
-408	AGCGCATGGA TGCA <u>CACGTA</u> GTTGGTGTCT CTTACCCTAA AATCGACGGT GAAGATG <u>GAC</u>	
	G-BOX	
-348	<u>ACGAGCG</u> TTA CTTGTCCCTC GTGTCTGATA ACTATCGGTA GACGAAACGA GATTATACCT	
	ABRE	
-288	TCCGA <u>CAAT</u> T TGGAGCGTCG GCTGCACGCG CTTTCTAATC AAAAAAAGA AAAAAAAGA	
	CAAT-BOX	
-228	AACGAGGGGT GTAGCGTAAA GAACGGTGTA ACTAACCGTA CCAGATTCCA ACTTTCGTTG	
-168	TGGATGTGAG CATCCAAGAG GAGGAGAGTC AGTG <u>TTATAA A</u> ACGACACGA TATCCTCACC	
	TATA-BOX	
-108	GAGTTTACGC CTTCAATTCA TCATCTCGTC GAAACACTT CCCTTCCTTT CTCTCTACTC	
-48	TCTCTCTCTC GTTATCTTCG GTTTCTGCTT TCTCTATTCG GAGGAGAGAT G	

-2200 CTGACACTGA ACTAAATCGA TAAAAAGTAT AAATAAAGCA CCATATGTTA TTAAAATATA

-2140 ATTCACAT AA AAAATATCAA ATAATTCATA GATTTCCTA TAAGCAA ATG ACTCGTCGGT
HSE Skn-1_motif

-1080 GACTGTAAAA TGAA ATTAAT CGGTACAAG T TATCTATGGA AAACAGTTCA ACTATTTAAC
Box 4 GA-motif

-2020 TATATCTTCT ACTACAGTGT CTTTTTCGTT CTAATTGAGT AATTCA TAAA CGTTTA
ACE

-1960 ATTCGATTGA TACTCATCAA CGCCTTAG CATTGTCAAT ATACAATAT AACATTGAG
I - BOX

-1900 ATGTCACCAA ATTTTGGTGA GGCTAAATAG AAAACATTAT AATTACGACG ACGACGAT AA

-1840 TCTAATCATA TATCATGGAA AGTCACAA T CTTACCGTGT AAAATCATTC GCCTCTTTCT
ATCT-motif TCT-motif

-1780 AATT CAATTA TTGTTTTAAC TTTAATTAGG TGGAT TGGTT TGAATTCTAC GTTTACCACA
HD-Zip 1 ARE

-1720 CCAGTCACCA CTTGGATAAA CCTTTAGGCC ATGAATGATA TTATATAATT TA GAAAGAA
AAGAA-motif

-1660 TGGAAACTAA ATCGTGATTG AAAGATAAAA GTATGTCAGC CACAAAATA GGAAAGATTT

-1600 CCTTTACATG ATAATAATTT TTTTCGAGATT CATTAGCAAC CTG CAAAAGG GAACAAAGAT
P-box

-1540 AAAGCATGAG TGGTCACTAG TACTCACTGA GTACCCAAAA AAAACACAAT TAAATGCTA A

-1480 GAAAAATTCCA CAAAATAATT TTTT GGTTAA GATATTTTAT TTTATATATA AAAAGGTATT
HSE GT1-motif

-1420 TATCCGATTG GAGGGTTGCA CACCATTCAA TACACTTAAT TA CGTCAGCC GTTCGAAAA
CGTCA-motif

-1360 GCCCTCCGAT ATATCCTCCT CTCTCACAAA CTTCTTCAAT TTTGTATTCA CTGGCAATAT

-1300 CTATGTACGG TTTGGTGAC TGTATCTTCT TACACGACTG TCTCGTATCG TATGAAGATG
G-BOX

-1240 AGATTAAAAT GAAAAAGTAT TGGAATCTAA CCTAATCGAA CAAATGCCAA AAATAATTTA
ATCT-motif ATCT-motif

-1180 GTACAACGTC GAATCGAATT TGTGAAAGTA CTATAGAATC GATTACATT AGAGACGAAT
TCA-element

-1120 ACGAGTTTTT ATTCCAATTT AAATTTTCATC GTAAACTGAA AAGTTTTTTT TTTTTTTTTT

-1060 TGCTTTGCAT TTTTCTTTTT TGCTTTATCT GACACGTAGTA TATTAATCAG CACACGGATG
G-BOX Box 4

-1000 TAGTTTTATC TCTTTGCCAA AAAAAGAGAG TCAAATCCTC AAATTTAATC CTACATAAAT
GAG-motif ATCT-motif

-940 GAGAATTTTG TTATTGTAA TCATAGCTTT TACAATTATA GCAAGCATTT ACTTTACCCC
AAGAA-motif

-880 AATAAAGTTT ATGGCAAGCA TTTATATATC GTGGATTGGT AAATTAACAA TTTTATACAG

-820 ATGGCCTGTT TTAATTAAGG GGTTAGATT TTCACTATGG CTTTCATTTA AACAAATTA
ATCT-motif

-760 AACCTGATA TTTTAACTAC GTATTTCCAT TTATCCTAAT CATGAAATTA ATACAAAATG
Box 4

-700 ATTTAGGCTC TTAACTATAT CTTCTTTTTT TATTGTTCAA AGCTCTTTAC TATTTATCCA

-640 TATTTGATAA TATGTACACT GAATCCATCT TTGTAAAAATA GGAAGAGAGA ATTAAATGAT
TCA-element

-580 ATATTTTAGA CCAAATACA CCCGATTTGG TAAATACTCA GAATATACCA TATGGATCAG

-520 ATAAATCATA ATCTTCACCT AACTAAATTA ATTTTCTACC ACGAAGGGGG ATTGACTACA
Box 4

-460 AAACCCGAAA AGTACTAATC ATGTACTTCC AGATCCGACG GCTAAAAACG CATCGATCAA
LTR

-400 CACGTAGTAG GTGTCTTTTC CCCTAAACTC AACGACCAAG ATGAACTCAA GCTTTACTTT
G-BOX TGA-element

-340 GCTGTCGTGT CCGACAATA CCGGATAGAT GAGGATGAAT CTAAATTCGG ACAAATAGAG
G-BOX CAAT-BOX

-280 CGTAGTCAAC ACGCGCGTAA ATGAGTTCTG ATGGTGTAGC GTAAAAACCG TGTACCCAAC

-220 CGTACCGGAT TCCATCTATC TTTCTGGATG GGAGCATCCA AAGAGAAGAA GGAGAGAGCT

-160 AGTCTTATAT AACGACACGA TATCCTCACC TATTTACGCC TCATTTTCTT CTTACCTCT
TATA-BOX

-100 CTCTCTGTGT GTGTTCTGTG TTCTCTCTCT CGCGCGAAGC GGTTCCTCTT CTTTTGTTTA

-40 TTTGTTTTTA TTTGTTTTTC TCTTATACGG AGGAGAGAAG ATG