

Tabla II

Características y secuencia del plásmido pAAV-MCS solo.

- 5 1-130: ITR izquierdo
 139-801: Promotor CMV
 809-1301: Intron de β -globina humana
 1308-1383: MCS
 1384-1862: PolyA
 10 1902-2042: ITR derecho
 2959-3819: Resistencia a Ampicilina

5`cctgcaggcagctgcgcgctcgctcgctcactgaggccgcccgggcgtcgggcgaccttt
 ggtcgcccggcctcagtgagcgagcgagcgcgagagagggagtggccaactccatcactag
 15 ggggttcctgcggccgcacgcgtggagctagttattaatagtaataattacgggggtcattag
 ttcatagcccataatatggagttccgcgttacataacttacggtaaatggcccgcctggctga
 ccgcccacgacccccgcccattgacgtcaataatgacgtatgttcccatagtaacgtcaat
 agggactttccattgacgtcaatgggtggagtatattacggtaaaactgcccacttggcagtac
 atcaagtgtatcatatgccaaagtacgccccctattgacgtcaatgacggtaaatggcccgc
 20 tggcattatgccagtagcatgaccttatgggactttcctacttggcagtagcatctacgtatt
 agtcatcgctattaccatgggtgatgcggttttggcagtagcatcaatgggcgtggatagcgg
 ttgactcacggggattttccaagtctccacccattgacgtcaatgggagtttgttttgcacc
 aaaatcaacgggactttccaaaatgtcgtaacaactccgccccattgacgcaaatgggcggt
 aggcgtgtacgggtgggaggtctatataagcagagctcggttagtgaaccgtcagatcgctg
 25 gagacgccatccacgctgttttgacctccatagaagacaccgggaccgatccagcctccgcg
 gattcgaatcccggccgggaacgggtgcattggaacgcggattccccgtgccaagagtgcgt
 aagtaccgcctatagagtctataggcccaaaaaatgctttcttcttttaataacttttt
 tgtttatcttattttctaatactttccctaattcttttctttcagggcaataatgatacaatg
 tatcatgcctctttgcaccattctaaagaataacagtgataatttctgggttaaggcaatag
 30 caatatttctgcatataaataatttctgcatataaattgtaactgatgtaagaggtttcatat
 tgctaatagcagctacaatccagctaccattctgcttttattttatgggttgggataaggctg
 gattattctgagtgcaagctaggcccttttgctaatacatgttcatacctcttatcttccctcc
 cacagctcctgggcaacgtgctgggtctgtgtgctggcccatcactttggcaaagaattggga

ARO

 ARO
 FOR
 QUINIMIO
 ARO

ttcgaacatcgattgaattccccggggatcctctagagtcgacctgcagaagcttgccctcga
gcagcgctgctcgagagatctacgggtggcatccctgtgaccctccccagtgccctctctg
gccctggaagttgccactccagtgcccaccagccttgtcctaataaaattaagttgcatcat
tttgtctgactaggtgtccttctataatattatgggggtggaggggggtggtatggagcaagg
5 ggcaagttgggaagacaacctgtagggcctgcgggggtctattgggaaccaagctggagtga
gtggcacaatcttggctcactgcaatctccgcctcctgggttcaagcgattctcctgcctca
gcctcccgagttgttgggattccaggcatgcatgaccaggctcagctaatttttgtttttt
ggtagagacggggtttcaccatattggccaggctggtctccaactcctaattctcaggtgatc
taccaccttggcctcccaaattgctgggattacaggcgtgaaccactgctcccttccctgt
10 ccttctgattttgtaggtaaccacgtgcggaccgagcggccgcaggaacccttagtgatgga
gttggccactccctctctgcgcgctcgctcgctcactgaggccgggaccaaaggctgccc
gacgcccgggctttgccggggcgccctcagtgagcgagcgagcgcgagctgcctgcagggg
cgctgatgcggtattttctccttacgcatctgtgcggtatttcacaccgcatacgtcaaag
caaccatagtagcgccctgtagcggcgcatthaagcgcgggcggtgtggtggttacgcgcag
15 cgtgaccgctacacttgccagcgccctagcgcccgctcctttcgctttcttcccttcccttc
tcgccacgttcgccggctttccccgtcaagctctaaatcgggggctccctttagggttccga
tttagtgctttacggcacctcgacccccaaaaaacttgatttgggtgatggttcacgtagtg
gccatcgccctgatagacgggtttttcgccctttgacggttgaggtccacgttctttaatagtg
gactcttgttccaaactggaacaacactcaaccctatctcgggctattcttttgatttataa
20 gggattttgccgattttcggcctattgggttaaaaaatgagctgatttaacaaaaatttaacgc
gaatttttaacaaaatattaacgtttacaattttatggtgcactctcagtacaatctgctctg
atgccgcatagttaagccagccccgacaccgcgaacacccgctgacgcgcctgacgggct
tgtctgctcccggcatccgcttacagacaagctgtgaccgtctccgggagctgcatgtgtca
gaggttttcacctcatcaccgaaacgcgcgagacgaaagggcctcgtgatacgcctatttt
25 tataggttaatgtcatgataataatgggttcttagacgtcaggtggcacttttcggggaaat
gtgcgcggaaccctattttgtttatttttctaaatacattcaaataatgtatccgctcatgag
acaataaccctgataaatgcttcaataatattgaaaaaggaagagtatgagtattcaacatt
tccgtgtcgcccttattcccttttttgcggcattttgccttccctgtttttgctcaccagaa
acgctggtgaaagtaaaagatgctgaagatcagttgggtgcacgagtggttacatcgaact
30 ggatctcaacagcggtaagatccttgagagttttcgccccgaagaacgttttccaatgatga
gcacttttaagttctgctatgtggcgcggtattatcccgtattgacgcggggcaagagcaa
ctcgggtcgccgcatacactattctcagaatgacttggttgagtactcaccagtcacagaaaa
gcatcttacggatggcatgacagtaagagaattatgcagtgctgccataaccatgagtgata

▲RO

▲▲ SUPRIMIDO POR 70

acactgcgcccaacttacttctgacaacgatcggaggaccgaaggagctaaccgcttttttg
cacaacatgggggatcatgtaactcgccttgatcggtgggaaccggagctgaatgaagccat
accaaacgacgagcgtgacaccacgatgcctgtagcaatggcaacaacggtgcgcaaactat
taactggcgaactacttactctagcttcccggcaacaattaatagactggatggaggcggat
5 aaagttgcaggaccacttctgcgctcggcccttccggctggctggtttattgctgataaatc
tggagccggtgagcgtgggtctcgcggtatcattgcagcactggggccagatggtaagccct
cccgatatcgtagttatctacacgacggggagtcaggcaactatggatgaacgaaatagacag
atcgctgagataggtgcctcactgattaagcattggtaactgtcagaccaagtttactcata
tatacttttagattgattttaaacttcatttttaattttaaaggatctaggtgaagatccttt
10 ttgataatctcatgacccaaaatcccttaacgtgagttttcgttccactgagcgtcagacccc
gtagaaaagatcaaaggatcttcttgagatcctttttttctgcgcgtaatctgctgcttgca
aacaaaaaaaccaccgctaccagcgggtggtttgtttgccggatcaagagctaccaactcttt
ttccgaaggtaactggcttcagcagagcgcagataccaaatactgtccttctagtgtagccg
tagttaggccaccacttcaagaactctgtagcacccgctacatacctcgtctctgctaactcct
15 gttaccagtggctgctgccagtggcgataagtcgtgtcttaccggggttgactcaagacgat
agttaccggataaggcgcagcggtcgggctgaacgggggggttcgtgcacacagcccagcttg
gagcgaacgacctacaccgaactgagatacctacagcgtgagctatgagaaagcgccacgct
tcccgaaggggagaaaggcggacaggtatccggtaagcggcagggtcggaacaggagagcgca
cgagggagcttccagggggaaacgcctggtatctttatagtcctgtcgggtttcgccacctc
20 tgacttgagcgtcgatttttgtgatgctcgtcaggggggaggagcctatggaaaaacgccag
caacgcggccttttttacggttcctggccttttgctggccttttgctcacatgt 3`

▲ 20

▲ 20 SUPRIMIDO POR 20

Tabla III

Mapa de restricción de AAV-PGK1-HA-Xbp-1-WPRE -

PGK1 189 a 528 nt

tag HA 1219 a 1248 nt

5 XBP1 1249 a 2367 nt

WPRE 2378 a 2967 nt

```
CTGCGAGGAGCTGCGGCTCGCTCGCTCACTGAGGCGCGCCGGGCAAGCCCGGGCTGCGGCGACCTTTGGTCGCGCGCTCAGTAGCGAGCGAGC < 100
GGACGTCGCTCGACGCGCGAGCGAGCGAGTGATCCGCGCGGCGCGCTTTTCGGGCGCCGACCGCTGGAACCCAGCGGCGAGTGATCTCGCTCGCTCG
10 20 30 40 50 60 70 80 90

GCGCAGAGAGGAGTGGCAACTCCATCACTAGGGGTTCTTCGCGCCGACCGCGGATCACGAGACTAGGCTCGACGATGGTCGAGTACCGGGTAGGGGA < 200
CGCTCTCTCTCTCGCTCGCGCTGAGTAGTGATCCCAAGGACCGCGCGGCGCGCTAGTGTCTCTGATCGGAGCTGCTACCGAGCTCATGGCCCATCCCT
110 120 130 140 150 160 170 180 190

GGCGCTTTTCCCAAGCGGCTGCGGATGCGCTTTAGCAGGCGCGCTGGGCGCTTGGCGCTACACAGTGGGCTCTGGGCTCGGCGCAATTCACATCC < 300
CGCGAAGAGGGTTCCGTCAGGCGCTGACCGGAGATCTCGGGGCGCGCGCTGGAACCGCGATGCTTCACCGGAGACCGGAGCGCTGTGTAGGGTGTAGG
210 220 230 240 250 260 270 280 290

>PGK Prom
ACCGTAGGCGGCGCAAGCGGCTCGCTTTTGGTGGGCGCTTCGCGCCGCTTCTACTCTCCCTAGTCAGGAGGTTCCCGCGCGCGCGCGAGTCCGOST < 400
TGGCGCTCGCGGCTTGGCGGAGCGCGAGGAGCGCGGCGGAGCGCGGCTGGAGAGTGGGAGGCGGCTCGCTCTTCAGGCGGCGCGCGGCTCGAGCGCG
310 320 330 340 350 360 370 380 390

CGTGCGGAGGCTGACAAATGGAAGTGCAGCTCTCACTAGTCTCGTSCAGATGGAACAGCGCGCTGAGCAATGGAGCGGGTAGGCGCTTTTGGGCGAGCGG < 500
GCACTCTCTGCGCTTTTACCTTCATCTGTCGAGGAGTGTTCAGAGCGAGCTTACTCTGCTGCGGAGCTCGTTCAGCTTCGCGGAGCGGCGGCTCGG
410 420 430 440 450 460 470 480 490

CCAAATGAGGCTTTGGCTCTGCTGCTGCGCTCAGAGGCTGGGAGGCGGCTGGGCTCGGCGCGCGGCTCAGGCGCGGCTCAGGCGCGGCGCGGCGGCG < 600
GGTTATCGCTCGAAGCGAGGAGCGAAGGAGCGGAGTCTCCGACCTTCCCGACCGCGGCGCGGCGCGGCTCAGGCGCGGCGCGGCGGCGGCGGCGG
510 520 530 540 550 560 570 580 590

CGAAGGCTCTCGGAGGCGCGGCAATTCGCAAGCTTCAAAAGCGCGAGCTCTGCGCGCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT < 700
GCTTCCAGGAGCGCTCCGCGCGGAGGAGCGGAGGAGTCTCCGACCTTCCCGACCGCGGCGCGGCGCGGCTCAGGCGCGGCGCGGCGGCGGCGGCGG
610 620 630 640 650 660 670 680 690

GGATCGGATTGCAATCCCGCGCGGAGCGGAGTTCGGAACCGGATTCGCGGCTGCGGAGGAGTGAAGTACCGGCTATAGAGTCTATAGGCGGCGGCAAA < 800
CCTAGGCTTAGGCTTAGGCGCGGCGGCTTGCAGCTAACCTTGCCTGCTAGGCGGCGGAGGCTTCTCACTGCAATTCAGGCGGAGTCTCAGATATCCGGGTGT
710 720 730 740 750 760 770 780 790

AAAATGCTTTCTCTTTTAAATATCTTTTGTATTCTTATTCTTAACTTTTCCCTAATCTCTTCTTTTCAAGGCAATATATGATACAAATGATCATGC < 900
TTTACGAAAGAGGAAATATATGAAAGAAACAAATAGATATAAGATATATGAAAGGAGTATAGGAAAGAAAGTCCGTTATTAATATGTTACATAGTACG
810 820 830 840 850 860 870 880 890

CTCTTTGCACCATTTAAAGAAATACAGTGATATTTCTGGGTTAAGGCAATAGCAATATTTCTGCATATAAATTTCTGCATATAAATTTGAACTGAT < 1000
GAGAAACGTGTAAGATTTCTTATTTGCTACTATTAAGACCCCAATTCGTTATCGTTATTAAGAGCTATATTTATAAGAGCTATATTTAGCAATTGACTA
910 920 930 940 950 960 970 980 990

GTAAGAGGTTTCATATTGCTAATAGCGCTACAAATCCAGCTACCAATCTCTCTTTTATTTTATGGTTGGGATAGGCTGATTTCTGAGTCCAAGCTAG < 1100
CAATTCCTCAAGATATACGATTTCTGCTGATGTTAGTCTGATGTAAGAGCGGAAATAAATACCAACCTATTTCCGACCTAATAGAGCTCAGGTTGATTC
1010 1020 1030 1040 1050 1060 1070 1080 1090

GCCCTTTTGTCAATCATGTTCACTCTTATCTTCTCTCCACAGCTCTTGGGCAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT < 1200
CGGGAAGCGATAGTAGTACAGTATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
1110 1120 1130 1140 1150 1160 1170 1180 1190

>HA tag
GATTCGAACATCGATGAGATGTAACCAATGATGTTCCAGATTACGCAATGTTGGTGGTGGGCGGCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG < 1300
CTAGCTTTGATGCTACTCTACATGGGATGCTACAGGCTCTAATGGGTTACCAACCAACCGCTGCGCGGCTGCGCGGCTGCGCGGCTGCGCGGCTGCGG
1210 1220 1230 1240 1250 1260 1270 1280 1290

TACTTTATCTGCGCGCGCGGCTTCCGCGCGGCGGCGGCTGCGGCTCATGCTACCGGCTCCGCGGCGAGCGGCTCGGAGGCGAGCGGCGGCGGCGGCGG < 1400
ATGAGATAGAGCTGCGGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG
1310 1320 1330 1340 1350 1360 1370 1380 1390
```

ARO

AA SUPRIMIDO POR RO

▲▲ SUPRIMIDO POR RO

▲▲ SUPRIMIDO POR RO

[illegible]

PCT/CL 2015 / 0 0 0 0 6 9

AA SUPRIMIDO POR RO

170/AA
9A

Tabla IV

Xbp1s (Ratón)

5 ORIGEN

1 ctagggtaaa accgtgagac tcggtctgga aatctggcct gagaggacag
cctggcaatc

61 ctcagccggg gtggggacgt ctgccgaaga tccttggact ccagcaacca
gtggtcgcca

10 121 ccgtccatcc accctaaggc ccagtttgca cggcggagaa cagctgtgca
gccacgctgg

181 aactcacc cgcccgagtt gagcccgccc ccgggactac aggaccaata
agtgatgaat

241 atacccgcgc gtcacggagc accggccaat cgcggacggc cacgacccta **AA**

15 gaaaggctgg

301 gcgcggcagg aggccacggg gcggtggcgg cgctggcgta gacgtttcct
ggctatggtg

361 gtggtggcag cggcgccgag cgcggccacg gcggccccc aagtgtact
cttatctggc

20 421 cagcccgct ccggcgggcg ggcgctgccg ctcatggtac ccggtccgcg
ggcagcaggg

481 tcggaggcga gcgggacacc gcaggctcgc aagcggcagc ggctcacgca
cctgagcccc

541 gaggagaaag cgctgcggag gaaactgaaa aacagagtag cagcgcagac

25 tgctcgagat

601 agaaagaaag ccgcatgag cgagctggag cagcaagtgg tggatttga
agaagagaac

661 cacaaactcc agctagaaaa tcagctttta cgggagaaaa ctcacggcct **AA**
tgtggttgag

30 721 aaccaggagt taagaacacg cttgggaatg gacacgctgg atcctgacga
ggttccagag

781 gtggaggcca aggggagtgg agtaaggctg gtggccgggt ctgctgagtc
cgcagcaggt

AA SUPRIMIDO POR 70

841 gcaggcccag ttgtcacctc cccagaacat cttcccatgg actctgacac
 tgttgcctct
 901 tcagattctg agtctgatat ccttttgggc attctggaca agttggaccc
 tgtcatgttt
 5 961 ttcaaagtgc cttccccaga gtctgctagt ctggagggaac tcccagaggt
 ctaccagaa
 1021 ggacctagtt ccttaccagc ctccctttct ctgtcagtgg ggacctcatc
 agccaagctg
 1081 gaagccatta atgaactcat tcgttttgac catgtataca ccaagcctct
 10 agtttttagag
 1141 atcccctctg agacagagag tcaaactaac gtggtagtga aaattgagga
 agcacctcta
 1201 agctcttcag aagaggatca cctgaattc attgtctcag tgaagaaaga
 gcctttggaa
 15 1261 gatgacttca tcccagagct gggcatctca aacctgcttt catccagcca ^{AR0}
 ttgtctgaga
 1321 ccaccttctt gcctgctgga cgctcacagt gactgtggat atgagggctc
 cccttctccc
 1381 ttcagtgaca tgtcttctcc acttggtaca gaccactcct gggaggatac
 20 ttttgccaat
 1441 gaacttttcc cccagctgat tagtgtctaa agagccacat aacactgggc
 ccctttccct
 1501 gaccatcaca ttgcctagag gatagcatag gcctgtctct ttcgttaaaa
 gccaaagtag
 25 1561 aggctgtctg gccttagaag aattcctcta aagtatttca aatctcatag
 atgacttcca
 1621 agtattgtcg tttgacactc agctgtctaa ggtattcaaa ggtattccag
 tactacagct
 1681 tttgagattc tagtttatct taaaggtggt agtatactct aaatcgcagg ^{AA}
 30 gagggtcatt
 1741 tgacagtttt ttcccagcct ggcttcaaac tatgtagccg aggctaggca
 gaaacttctg
 1801 accctcttga cccacactcc caagtgtggt gcttcaccag gtgtgcacct

ccacacctgc

1861 ccccccgaca tgtcaggtgg acatgggatt catgaatggc ccttagcatt
tctttctcca

1921 ctctctgctt cccaggtttc gtaacctgag ggggcttggt ttcccttatg

5 tgcatttttaa

1981 atgaagatca agaattcttg taaaatgatg aaaatttact atgtaaatgc
ttgatggatc

2041 ttcttgctag ttagcttct agaaggtgct ttctccattt atttaaaact
acccttgcaa

10 2101 ttaaaaaaaa agcaacacag cgtcctgttc tgtgatttct agggctgttg
taatttctct

2161 ttattgttgg ctaaaggagt aatttatcca actaaagtga gcataccact
ttttaagtc

ARO

2221 aaaaaaaaaa aaaaaaaaa

15

AA SUPRIMIDO POR RO

Tabla V

Xbp1u (Ratón)

5 ORIGEN

1 ctagggtaaa accgtgagac tcggtctgga aatctggcct gagaggacag
cctggcaatc

61 ctcagccggg gtggggacgt ctgccgaaga tccttgact ccagcaacca
gtggtcgcca

10 121 ccgtccatcc accctaaggc ccagtttgca cggcggagaa cagctgtgca
gccacgctgg

181 aactcacc cgcgcgagtt gagcccgccc ccgggactac aggaccaata
agtgatgaat

241 atacccgcmc gtcacggagc accggccaat cgcggacggc cacgacccta ^{ΔPO}

15 gaaaggctgg

301 gcgcggcagg aggccacggg gcggtggcgg cgctggcgta gacgtttcct
ggctatggtg

361 gtggtggcag cggcgccgag cgcggccacg gcggccccc aagtgtact
cttatctggc

20 421 cagcccgct ccggcggccg ggcgtgccg ctcatggtac ccggtccgcg
ggcagcagg

481 tcggaggcga gcgggacacc gcaggctcgc aagcggcagc ggctcacgca
cctgagccc

541 gaggagaaag cgctgcggag gaaactgaaa aacagagtag cagcgcagac

25 tgctcgagat

601 agaaagaaag ccgcatgag cgagctggag cagcaagtgg tggatttga
agaagagaac

661 cactaaactcc agctagaaaa tcagctttta cgggagaaaa ctcacggcct
tgtggttgag

30 721 aaccaggagt taagaacacg cttgggaatg gacacgctgg atcctgacga
ggttccagag

781 gtggaggcca aggggagtgg agtaaggctg gtggccgggt ctgctgagtc
cgcagcactc

PO SUPRIMIDO POR AA

841 agactatgtg cacctctgca gcaggtgcag gcccagttgt cacctcccca
gaacatcttc
901 ccatggactc tgacactggt gcctcttcag attctgagtc tgatatacctt
ttgggcattc
5 961 tggacaagtt ggaccctgtc atgtttttca aatgtccttc cccagagtct
gctagtctgg
1021 aggaactccc agaggtctac ccagaaggac ctagttcctt accagcctcc
ctttctctgt
1081 cagtggggac ctcatcagcc aagctggaag ccattaatga actcattcgt
10 tttgaccatg
1141 tatacaccaa gcctctagtt ttagagatcc cctctgagac agagagtcaa
actaacgtgg
1201 tagtgaaaat tgaggaagca cctctaagct cttcagaaga ggatcacct
gaattcattg
15 1261 tctcagtga gaaagagcct ttggaagatg acttcatccc agagctgggc
atctcaaacc
1321 tgctttcatc cagccattgt ctgagaccac cttcttgctt gctggacgct
cacagtgact
1381 gtggatatga gggctcccct tctcccttca gtgacatgtc ttctccactt
20 ggtacagacc
1441 actcctggga ggatactttt gccaatgaac ttttccccca gctgattagt
gtctaaagag
1501 ccacataaca ctgggcccct ttccctgacc atcacattgc ctagaggata
gcataggcct
25 1561 gtctctttcg ttaaaagcca aagtagaggc tgtctggcct tagaagaatt
cctctaaagt
1621 atttcaaata tcatagatga cttccaagta ttgtcgtttg acactcagct
gtctaaggta
1681 ttcaaaggta ttccagtact acagcttttg agattctagt ttatcttaaa
30 ggtggtagta
1741 tactctaaat cgcagggagg gtcatttgac agttttttcc cagcctggct
tcaaactatg
1801 tagccgaggc taggcagaaa cttctgaccc tcttgacccc acctcccaag

ARO

AA SUPRIMIDO POR RO

tgctgggctt
 1861 caccaggtgt gcacctccac acctgcccc cgcacatgtc aggtggacat.
 gggattcatg
 1921 aatggccctt agcatttctt tctccactct ctgcttccca ggtttcgtaa
 5 cctgaggggg
 1981 cttgttttcc cttatgtgca ttttaaata gaatcaagaa tctttgtaaa
 atgatgaaaa
 2041 ttactatgt aaatgcttga tggatcttct tgctagtgt gcttctagaa
 ggtgctttct
 10 2101 ccattttattt aaaactaccc ttgcaattaa aaaaaaagca acacagcgtc
 ctgttctgtg
 2161 atttctaggg ctgttgtaat ttctctttat tgttggctaa aggagtaatt ARO
 tatccaacta
 2221 aagtgagcat accacttttt aaagtcaaaa aaaaaaaaaa aaaa

15

AA SUPRIMIDO POR RO

Tabla VIII

Xbp1s (Humana)

5 ORIGEN

1 ggcgctgggc ggctgcggcg cgcggtgcgc ggtgcgtagt ctggagctat
ggtggtggtg
61 gcagccgcgc cgaaccgggc cgacgggacc cctaaagttc tgcttctgtc
ggggcagccc
10 121 gcctccgccg ccggagcccc ggccggccag gccctgccgc tcatggtgcc
agcccagaga
181 ggggccagcc cggaggcagc gagcgggggg ctgccccagg cgcgcaagcg
acagcgctc
241 acgcacctga gccccgagga gaaggcgctg aggaggaaac tgaaaaacag [▲]RO
15 agtagcagct
301 cagactgcca gagatcgaaa gaaggctcga atgagtgagc tggaacagca
agtggtagat
361 ttagaagaag agaaccaaaa acttttgcta gaaaatcagc ttttacgaga
gaaaactcat
20 421 ggccttgtag ttgagaacca ggagttaaga cagcgcttgg ggatggatgc
cctggttgct
481 gaagaggagg cggaagccaa ggggaatgaa gtgaggccag tggccgggtc ^{RO}
tgctgagtcc
541 gcagcaggtg caggcccagt tgtcaccct ccagaacatc tccccatgga
25 ttctggcggt
601 attgactctt cagattcaga gtctgatatc ctgttgggca ttctggacaa
cttggaacca
661 gtcatgttct tcaaagtccc ttccccagag cctgccagcc tggaggagct
cccagaggtc
30 721 taccagaag gaccagttc cttaccagcc tccctttctc tgtcagtggg
gacgtcatca
781 gccaaagctgg aagccattaa tgaactaatt cgttttgacc acatatatac
caagccccta

RO
FOR
AMIN
▲

17/11

16^A

841 gtcttagaga taccctctga gacagagagc caagctaatz tggtagtga
 aatcgaggaa
 901 gcacctctca gccctcaga gaatgatcac cctgaattca ttgtctcagt
 gaaggaagaa
 5 961 cctgtagaag atgacctcgt tccggagctg ggtatctcaa atctgctttc
 atccagccac
 1021 tgcccaaagc catcttctctg cctactggat gcttacagtg actgtggata
 cggggggtcc
 1081 ctttccccat tcagtgcacat gtcctctctg cttgggtgtaa accattcttg
 10 ggaggacact
 1141 ttgccaatz aactctttcc ccagctgatt agtgtctaag gaatgatcca
 atactgttgc
 1201 ccttttctct gactattaca ctgcctggag gatagcagag aagcctgtct
 gtacttcatt
 15 1261 caaaaagcca aaatagagag tatacagttc tagagaattc ctctatttgt
 tcagatctca
 1321 tagatgaccc ccaggtattg tcttttgaca tccagcagtc caaggtattg
 agacatatta
 1381 ctggaagtaa gaaatattac tataattgag aactacagct ttaagattg
 20 tactttttatc
 1441 ttaaaagggg ggtagttttc cctaaaatac ttattatgta agggtcatta
 gacaaatgtc
 1501 ttgaagtaga catggaattt atgaatgggt ctttatcatt tctcttcccc
 ctttttgga
 25 1561 tcctggcttg cctccagttt taggtccttt agtttgcttc tgtaagcaac
 gggaacacct
 1621 gctgaggggg ctctttccct catgtatact tcaagtaaga tcaagaatct
 tttgtgaaat
 1681 tatagaaatt tactatgtaa atgcttgatg gaattttttc ctgctagtgt
 30 agcttctgaa
 1741 aggtgctttc tccatttatt taaaactacc catgcaatta aaaggtacaa
 tgcaaaaaaa
 1801 aaaaaaaaaa

170

170
FOR
MINING
170

Tabla IX

Xbp1u (Humana)

5 ORIGEN
1 ggcgctgggc ggctgcggcg cgcggtgcgc ggtgcgtagt ctggagctat
ggtggtggtg
61 gcagccgcgc cgaaccgggc cgacgggacc cctaaagttc tgcttctgtc
ggggcagccc
10 121 gcctccgccg ccggagcccc ggccggccag gccctgccgc tcatgggtgcc
agcccagaga
181 ggggccagcc cggaggcagc gagcgggggg ctgccccagg cgcgcaagcg
acagcgcctc
241 acgcacctga gccccgagga gaaggcgctg aggaggaaac tgaaaaacag
15 agtagcagct
301 cagactgcc a gagatcgaaa gaaggctcga atgagtgagc tggaacagca
agtggtagat
361 ttagaagaag agaaccaaaa acttttgcta gaaaatcagc ttttacgaga
gaaaactcat
20 421 ggccttgtag ttgagaacca ggagttaaga cagcgcttgg ggatggatgc
cctggttgct
481 gaagaggagg cggaagccaa ggggaatgaa gtgaggccag tggccgggtc
tgctgagtc
541 gcagcactca gactacgtgc acctctgcag caggtgcagg ccagttgtc
25 acccctccag
601 aacatctccc catggattct ggcggtattg actcttcaga ttcagagtct
gatatcctgt
661 tgggcattct ggacaacttg gaccagtc tgttcttcaa atgcccttcc
ccagagcctg
30 721 ccagcctgga ggagctccca gaggtctacc cagaaggacc cagttcctta
ccagcctccc
781 tttctctgtc agtggggacg tcatcagcca agctggaagc cattaatgaa
ctaattcggt

AA RO

AA SUPRIMIDO POR RO

841 ttgaccacat atataccaag cccctagtct tagagatacc ctctgagaca
gagagccaag
901 ctaatgtggt agtgaaaatc gaggaagcac ctctcagccc ctccagagaat
gatcaccctg
5 961 aattcattgt ctccagtgaag gaagaacctg tagaagatga cctcgttccg
gagctgggta
1021 tctcaaactc gctttcatcc agccactgcc caaagccatc ttcttgctta
ctggatgctt
1081 acagtgactg tggatacggg ggttcccttt ccccatcag tgacatgtcc
10 tctctgcttg
1141 gtgtaaacca ttcttgggag gacacttttg ccaatgaact ctttccccag
ctgattagtg
1201 tctaaggaat gatccaatac tgttgccctt ttcttgact attacactgc
ctggaggata
15 1261 gcagagaagc ctgtctgtac ttcatcaca aagccaaaat agagagtata
cagtcctaga
1321 gaattcctct atttggtcag atctcataga tgacccccag gtattgtctt
ttgacatcca
1381 gcagtccaag gtattgagac atattactgg aagtaagaaa tattactata
20 attgagaact
1441 acagctttta agattgtact tttatcttaa aagggtggta gttttcccta
aaatacttat
1501 tatgtaaggg tcattagaca aatgtcttga agtagacatg gaatttatga
atggttcttt
25 1561 atcattttctc ttcccccttt ttggcatcct ggcttgccctc cagtttttagg
tccttttagtt
1621 tgcttctgta agcaacggga acacctgctg agggggctct ttccctcatg
tataacttcaa
1681 gtaagatcaa gaatcttttg tgaaattata gaaatttact atgtaaactgc
30 ttgatggaat
1741 tttttcctgc tagtgtagct tctgaaagggt gctttctcca tttatttaaa
actacccatg
1801 caattaaaag gtacaatgca

AR

AA SUPPRIMIDO POR RO

5 ggcggatccaattgacctaggcccaagggcgaaattgtcacgactccacccctccaggaacccc
tagtgatggagttggccactccctctctgcgcgctcgctcgctcactgagggccgcccgggca
aagcccgggcgctcgggcgacctttggctgccccggcctcagtgagcgagcgagcgcgagaga
gggagtgggccagatctgatatcatcgatgaattcaagcttcagctgctcgagttctatagt
gtcacctaaatcgatatgtgtatgatacataaggttatgtattaattgtagccgcgttctaac
10 gacaatatgtccatatggtgcactctcagtacaatctgctctgatgccgcatagtttaagcca
gccccgacacccgccaacacccgctgacgcgcccctgacgggcttgtctgctcccggcatccg
cttacagacaagctgtgaccgtctccgggagctgcatgtgtcagaggttttcaccgtcatca
ccgaaacgcgcgagacgaaagggcctcgtgatacgcctatTTTTTataggTTaatgtcatgat
aataatggTTTTcttagacgtcaggtggcactTTTTcggggaaatgtgcgcggaacccctatTT 20
15 gTTTTTTTTctaaatacattcaaatatgtatccgctcatgagacaataaccctgataaatg
cttcaataatattgaaaaaggaagagtatgagtattcaacatttccgtgtcgcccttattcc
ctTTTTtgcgcatTTTTgccttccctgTTTTgtcaccagaaaacgctggtgaaagtaaaag
atgctgaagatcagttgggtgcacgagtgggttacatcgaactggatctcaacagcggtaag
atccttgagagTTTTcgccccgaagaacgTTTTccaatgatgagcactTTTaaagtTctgct
20 atgtggcgcggtattatcccgtattgacgccgggcaagagcaactcggtcgccgcatacact
attctcagaatgacttggttgagtactcaccagtcacagaaaagcatcttacggatggcatg
acagtaagagaattatgcagtgtgtccataacatgagtgataacactgcgggccaacttact
tctgacaacgatcggaggaccgaaggagctaaccgctTTTTtgcaaacatgggggatcatg
taactcgccttgatcgttgggaaccggagctgaatgaagccataccaaacgacgagcgtgac
25 accacgatgcctgttagcaatggcaacaacgttgcgcaaacatttaactggcgaactacttac
tctagcttcccggcaacaattaatagactggatggaggcggataaagttgcaggaccacttc
tgcgctcgggcccttccggctggctggTTTTattgctgataaatctggagccggtgagcgtggg
tctcgcggtatcattgcagcactggggccagatggtaagccctcccgtatcgtagttatcta
cacgacggggagtcaggcaactatggatgaacgaaatagacagatcgctgagataggtgcct
30 cactgattaagcattggtaactgtcagaccaagtttactcatatatactTTtagattgattta
aaacttcattTTTTaatttaaaaggatctaggtgaagatcctTTTTgataatctcatgaccaa
aatcccttaacgtgagTTTTcgttccactgagcgtcagaccccgtagaaaagatcaaaggat
cttcttgagatcctTTTTTctgcgcgtaatctgctgcttgcaaacaaaaaaaccaccgcta

ccagcgggtggtttgtttgccggatcaagagctaccaactctttttccgaaggtaactggcct
 cagcagagcgcagataccaaatactgtccttctagtgtagccgtagttaggccaccacttca
 agaactctgtagcaccgcctacatacctcgctctgctaactcctgttaccagtggctgctgcc
 agtggcgataagtctgtgtcttaccgggttggaactcagacgatagttaccggataaggcgag
 5 cggtcgggctgaacgggggggttcgtgcacacagcccagcttggagcgaacgacctacaccga
 actgagatacctacagcgtgagcattgagaaagcgccacgcttcccgaaggagaaaggcgg
 acaggtatccggtaagcggcagggtcggaacaggagagcgcacgagggagcttccaggggga
 aacgcctgggtatctttatagtcctgtcgggtttcgccacctctgacttgagcgtcgattttt
 gtgatgctcgtcaggggggaggagcctatggaaaaacgccagcaacgcggcctttttacgg
 10 tcctggccttttgcctggccttttgccacatgttctttcctgcgttatcccctgattctgtgg
 ataaccgtattaccgcctttgagtgagctgataccgctcgccgcagccgaacgaccgagcgc
 agcgagtcagtgagcgcaggaagcgggaagagcgcccaatacgcaaaccgcctctccccgcgcg
 ttggccgattcattaatgcagggttaacctggccttatcgaaattaatacgactcactatagg
 agaccggcagatctgtccctctctgcgcgctcgctcgctcactgaggccgcccgggcaaagc
 15 ccgggcgctcgggcgacctttggctgccccggcctcagtgagcgcgagcgcgcgagagagggg ^{RO}
 gtggccaactccatcactaggggttccttgtagttaatgattaaccgcctatgctacttattc
 tacaattcgcccttcggacgcgtggcttcgaactaggcaattgcatgaagaatctgcttagg
 gttaggcggttttgcgctgcttcgcgatgtacggggccagatatacgcgcttgacattgattatt
 gactagttattaatagtaatacaattacgggggtcattagttcatagcccatatatggagttcc
 20 gcgttacataacttacggtaaatggcccgccctggctgaccgcccacgacccccgcccattg
 acgtcaataatgacgtatgttcccatagtaacgccaatagggactttccattgacgtcaatg
 ggtggagtatttacggtaaaactgcccaacttggcagtacatcaagtgtatcatatgccaaagta
 cggccccctattgacgtcaatgacggtaaatggcccgccctggcattatgccagtacatgacc
 ttatgggactttcctacttggcagtacatctacgtattagtcacgtattaccatgggtgat ^{RO}
 25 gcgggttttggcagtacatcaatgggcgtggatagcgggttgactcacggggatttccaagtc ^{RO}
 tccacccccattgacgtcaatgggagtttgttttggcaccaaaatcaacgggactttccaaaa ^{RO}
 tgtcgtaacaactccgccccattgacgcaaattgggcggtaggcgtgtacgggtgggaggtcta ^{RO}
 tataagcagagctctctggctaactagagaaccactgcttactggccttatcgaaattaata ^{RO}
 cgactcactataggagaccaagctggctagcgtttaaacttaagcttcctggctatgggtg ^{AA}
 30 gtgggtggcagccgcgcgaacccggccgagggaccctaaagtctctgcttctgtcggggca
 gcccgcctccgcccgggagccccggccggccaggccctgccgctcatgggtgccagcccaga
 gagggggccagcccggaggcagcgcgagcggggggctgccccaggcgcgcaagcgacagcgccctc
 acgcacctgagccccgaggagaaggcgcgtgaggaggaaactgaaaaacagagtagcagctca

gactgccagagatcgaaagaaggctcgaatgagtgagctggaacagcaagtggtagatttag
 aagaagagaaccaaaaaacttttgctagaaaatcagcttttacgagagaaaactcatggcctt
 gtagttgagaaccaggaggttaagacagcgcttggggatggatgccctgggtgctgaagagga
 ggcggaagccaaggggaatgaagtgaggccagtggccgggtctgctgagtcgcgcagcaggtg
 5 caggcccagttgtcacccctccagaacatctcccatggattctggcggtattgactcttca
 gattcagagtctgatatcctgttgggcattctggacaacttggaaccagtcattgttcttcaa
 atgcccttccccagagcctgccagcctggaggagctcccagaggtctaccagaaggacca
 gttccttaccagcctccctttctctgtcagtggggacgtcatcagccaagctggaagccatt
 aatgaactaattcgttttgaccacatatataccaagcccctagtcttagagataccctctga
 10 gacagagagccaagctaattgtggtagtgaaaatcgaggaagcacctctcagcccctcagaga
 atgatcacccctgaattcattgtctcagtgaaggaagaacctgtagaagatgacctcggtccg
 gagctgggtatctcaaactctgctttcatccagccactgcccgaagccatcttctgctact
 ggatgcttacagtgactgtggatacgggggttccctttccccattcagtgcattgtcctctc
 tgcttgggtgtaaaccattcttggggaggacacttttgccaatgaactcttccccagctgatt
 15 agtgtctaccatacagatgttccagattacgcaatgtaaagagccacataaactgggcccc ^{▲ RO}
 tttccctgaccatcacattgcctagaggatagcataggcctgaagggcgaattccagcacac
 tggcgggccgttactagagggcccggttaaaacccgctgatcacctcgactgtgccttctagtt
 gccagccatctgttgtttgcccctccccgtgccttcccttgaccctggaaggtgccactccc
 actgtcctttcctaataaaaatgaggaaattgcatcgcatgtctgagtaggtgtcattctat
 20 tctgggggggtgggggtggggcaggacagcaagggggaggattgggaagacaatagcaggcatg
 cctgcagcgggtccgggtcgactctagaggatccgaaaaaacctcccacacctccccctgaacc
 tgaaacataaaaatgaatgcaattgttgttgtaacttgtttattgcagcttataatggttac
 aaataaagcaatagcatcaciaatttcaciaataaagcatttttttactgcattctagttg
 tggtttgtccaaactcatcaatgtatcttatcatgtctggatccccgcgggtggcgccgcac
 25 tagtcccgggttaattaagctagcagatcttgatcacctaggcgtacgatttggccgcttta
 catggtggcgaccggggatcctctagtaccaagctaattcctcacgacacctgaaatggaag
 aaaaaaactttgaaccactgtctgaggcttgagaatgaaccaagatccaaactcaaaaagg
 caaattccaaggagaattacatcaagtgccaaagtggcctaacttcagtctccaccactca
 gtgtggggaaactccatcgcataaaaccctcccccaacctaaagacgacgtactccaaaa [▲]
 30 gctcgagaactaatcgaggtgcctggacggcgcccggtactccgtggagtcacatgaagcga
 cggctgaggacggaaaggcccttttcccttgtgtgggtgactcaccgcccgtctcccgag
 cgccgcgtcctccattttgagctccctgcagcagggccgggaagcggccatcttccgctca
 cgcaactgggtgccgaccggggccagccttgccgcccagggcgggggcgatacacggcgggcgca

183/AA

22^A

ggccaggcaccagagcaggccggccagcttgagactacccccgtccgattctcggtggccgc
 gctcgcaggccccgcctcgccgaacatgtgcgctgggacgcacgggccccgtcgccgccccgc
 ggccccaaaaaccgaaataccagtgtgcagatcttggcccgcatTTTacaagactatcttgcc
 agaaaaaaagcgtcgcagcaggtcatcaaaaattTTTaaatggctagagacttatcgaaagca
 5 gcgagacaggcgcggaaggtgccaccagattcgcacgcggcgccccagcgcccaggccaggc
 ctcaactcaagcacgaggcgaaggggtccttaagcgcaaggcctcgaaactctcccaccac
 ttccaacccgaagctcgggatcaagaatcacgtactgcagccagggtggaagtaattcaaggc
 acgcaagggccataacccgtaaaagaggccaggccccgcgggaaccacacacggcacttacctg
 tgttctggcggaacccggttgcaaaaagaacgttcacggcgactactgcacttatatacg
 10 gttctccccaccctcgggaaaaaggcgagccagtagcacgacatcactttcccagtttacc
 ccgcgccaccttctctaggcaccgg

Features :

XBP1s : [3257 : 5917 - CW]
 15 cdd XBP1s : [3593 : 4720 - CW]
 HA : [4721 : 4750 - CW]
 L-ITR : [89 : 196 - CW]
 R-ITR : [2629 : 2736 - CW]
 T7 : [2587 : 2606 - CW]
 20 T7 : [3532 : 3551 - CW]
 SP6 : [259 : 242 - CCW]
 ColE1 origin : [1719 : 2347 - CW]
 AmpR : [908 : 1567 - CW]
 SV40 late polyA : [5311 : 5120 - CCW]
 25 Amp prom : [640 : 668 - CW]
 HA tag : [4721 : 4747 - CW]

AA RO

AA SUPRIMIDO POR RO