

**pTagFP635-actinin** vector restriction map

The data has not been verified by restriction digestion with each enzyme listed and does not take into account possible methylation sites. Enzymes that recognize unambiguous sequences less than 6 basepairs long are not included – for the more complete enzyme list please refer to the Table of restriction sites.

Unique sites are shown in bold blue. The location given specifies the 3' end of the cut DNA (the base to the left of the cut site). TagFP635 amino acids are shown in red,  $\alpha$ -Actinin amino acids are shown in green, linker amino acids are shown in black.













\_Chi
Bpm1
Nco1
Xcm1
Ale1
BseY1
BtgZ1
Pvu2

```

GAGGGCGACCACCAGCTCATCCAGGAGGCGCTCATCTTCGACAACAAGCACACCAACTACACCATGGAGCACATCCGTGTGGGCTGGGAGCAGCTGCTCA
2701 |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 2800
CTCCCGCTGGTGGTTCGAGTAGGTCCCTCCGCGAGTAGAAGCTGTTGTTTCGTGTGGTTGATGTGGTACCTCGTGTAGGCACACCCGACCCTCGTTCGACGAGT
Actinin > E G D H Q L I Q E A L I F D N K H T N Y T M E H I R V G W E Q L L T
    
```

SpDon
AlwN1
Sma1
Xmn1

```

CCACCATCGCCAGGACCATCAATGAGGTAGAGAACCAGATCCTGACCCGGGATGCCAAGGGCATCAGCCAGGAGCAGATGAATGAGTTCCGGGCCTCCTT
2801 |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 2900
GGTGGTAGCGGTCCCTGGTAGTTACTCCATCTCTTGGTCTAGGACTGGGCCCTACGGTTCCTCGTCTACTTACTCAAGGCCCGGAGGAA
Actinin > T I A R T I N E V E N Q I L T R D A K G I S Q E Q M N E F R A S F
    
```

SanD1
Bmr1
BseR1

```

CAACCACTTTGACCGGGATCACTCCGGCACACTGGGTCCCCGAGGAGTTCAAAGCCTGCCTCATCAGCTTGGGTTATGATATTGGCAACGACCCCCAGGGA
2901 |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 3000
GTTGGTGAACCTGGCCCTAGTGAGGCCGTGTGACCCAGGGCTCCTCAAGTTTTCGGACGGAGTAGTTCGAACCAATACTATAACCGTTGCTGGGGGTCCCT
Actinin > N H F D R D H S G T L G P E E F K A C L I S L G Y D I G N D P Q G
    
```

BstAP
BspH1
BstX1
Stu1
Ahd1

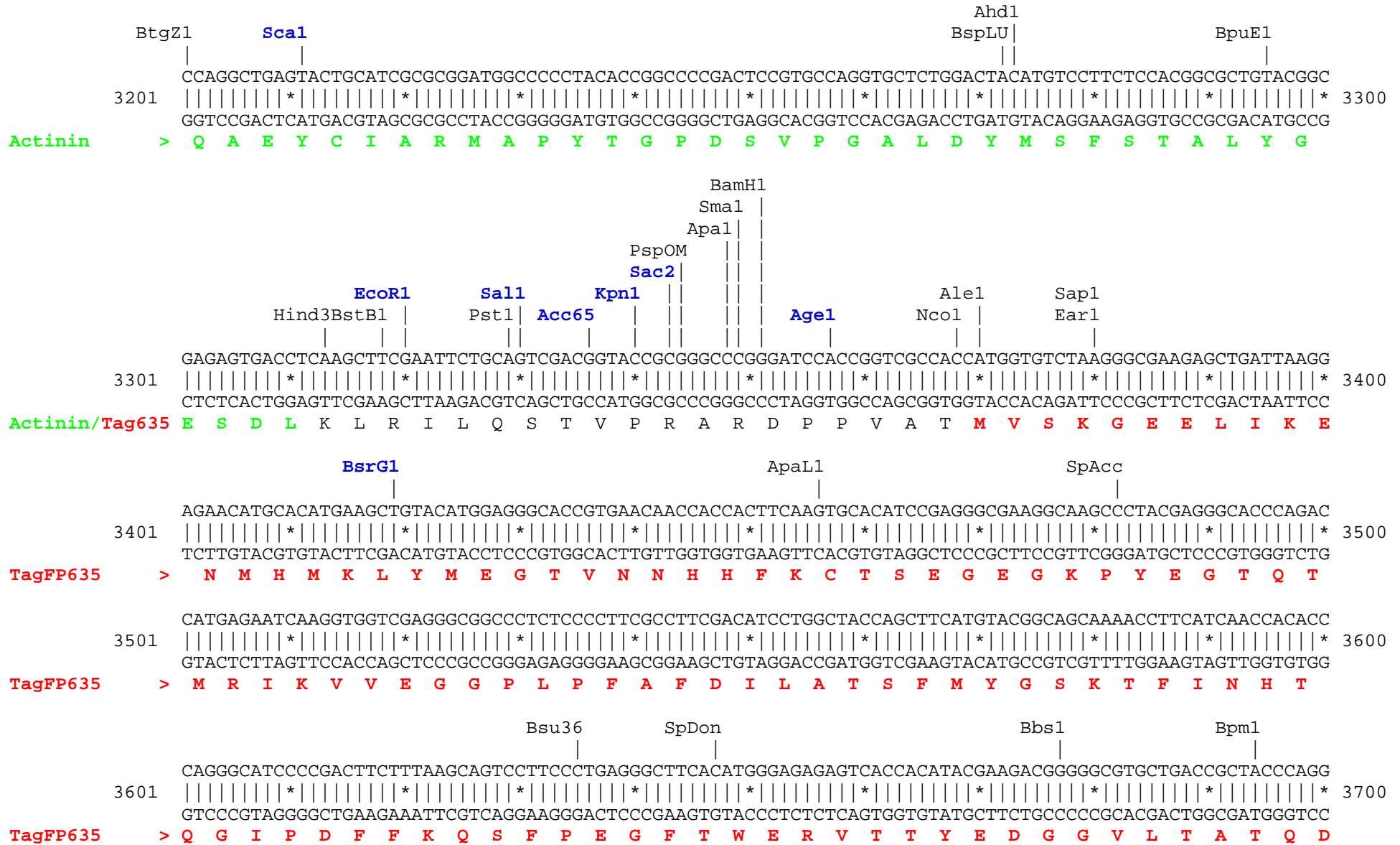
```

GAAGCAGAATTTGCCCCATCATGAGCATTGTGGACCCCAACCGCCTGGGGGTAGTGACATTCCAGGCCTTCATTGACTTCATGTCCC GCGAGACAGCCG
3001 |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 3100
CTTCGTCTTAAACGGGCGTAGTACTCGTAACACCTGGGGTTGGCGGACCCCATCACTGTAAGGTCCGGAAGTAACTGAAGTACAGGGCGCTCTGTCCGGC
Actinin > E A E F A R I M S I V D P N R L G V V T F Q A F I D F M S R E T A D
    
```

PflF1PflM1
BseY1
Nco1

```

ACACAGATACAGCAGACCAAGTCATGGCTTCCCTTCAAGATCCTGGCTGGGGACAAGAACTACATTACCATGGACGAGCTGCGCCCGGAGCTGCCACCCGA
3101 |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 3200
TGTGTCTATGTCGTCTGGTTCAGTACCGAAGGAAGTTCTAGGACCGACCCCTGTTCTTGTATGTAATGGTACCTGCTCGACGCGGCGCTCGACGGTGGGCT
Actinin > T D T A D Q V M A S F K I L A G D K N Y I T M D E L R R E L P P D
    
```













```

                                     Bsa1
                                     |
6401 CGGTCCCAGGGCTGGCACTCTGTGATACCCACCGAGACCCATTGGGGCCAATACGCCCGGTTTCTTCCTTTTCCCCACCCACCCCCAAGTTCGG
   |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 6500
   GCCAGGGTCCCAGCGTGAGACAGCTATGGGGTGGCTCTGGGGTAACCCCGTTATGCGGGCGCAAAGAAGGAAAAGGGGTGGGGTGGGGGGTTCAAGCC

                                     BstAP
                                     AlwN1
                                     Bsu36
                                     Dra1
6501 GTGAAGGCCCAGGGCTCGCAGCCAACGTCGGGGCGGCAGGCCCTGCCATAGCCTCAGGTTACTCATATATACTTTAGATTGATTTAAAAC TTCATTTTTTA
   |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 6600
   CACTTCCGGGTCCCAGCGTCGGTTGCAGCCCCCGCGTCCGGGACGGTATCGGAGTCCAATGAGTATATATGAAATCTAACTAAATTTTGAAGTAAAAAT

Dra1
                                     BspH1
6601 ATTTAAAAGGATCTAGGTGAAGATCCTTTTTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAG
   |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 6700
   TAAATTTTCTAGATCCACTTCTAGGAAAAACTATTAGAGTACTGGTTTTAGGGAATTGCACTCAAAGCAAGGTGACTCGCAGTCTGGGGCATCTTTTC

                                     BpuE1
6701 ATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAACCACCGCTACCAGCGGTGGTTTGTGTTGCCGGATCAAG
   |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 6800
   TAGTTTCCTAGAAGAACTCTAGGAAAAAAGACGCGCATTAGACGACGAACGTTTGTTTTTTTGGTGGCGATGGTGCACCACCAAACAAACGGCCTAGTTC

Eco57
                                     SpAcc
6801 AGCTACCAACTCTTTTTTCCGAAGGTAAGTGGCTTCAGCAGAGCGCAGATACCAAATACTGTCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAA
   |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 6900
   TCGATGGTTGAGAAAAAGGCTTCCATTGACCGAAGTCGTCTCGCGTCTATGGTTTATGACAGGAAGATCACATCGGCATCAATCCGGTGGTGAAGTTCTT

                                     AlwN1
                                     BpuE1
6901 CTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCAGGGTTGGACTCAAGACGA
   |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 7000
   GAGACATCGTGGCGGATGTATGGAGCGAGACGATTAGGACAATGGTCAACCGACGACGGTCACCGCTATTACAGCACAGAATGGCCCAACCTGAGTTCTGCT
```



Found:

Aar1	Aat2	<b>Acc65</b>	<b>Afe1</b>	<b>Afl2</b>	<b>Age1</b>	Ahd1	Ale1	AlwN1	Apa1	Apal1	<b>Ase1</b>	Avr2	BamH1
Bbs1	BciV1	<b>Bcl1</b>	BfrB1	BfuA1	Bgl1	Bgl2	Blp1	BmgB1	Bmr1	Bpm1	BpuE1	Bsa1	BsaB1
BsaXa	BsaXb	BseR1	BseY1	Bsg1	Bsm1	BspE1	BspH1	BspLU	BspM1	BsrB1	<b>BsrD1</b>	<b>BsrG1</b>	BssS1
BstAP	BstB1	BstX1	Bsu36	BtgZ1	<b>Bts1</b>	<b>_Chi</b>	<b>Clal</b>	Dra1	Dra3	Drd1	Eag1	Ear1	Ecil
Eco57	EcoN1	<b>EcoR1</b>	<b>Fsp1</b>	Hind3	<b>Hpa1</b>	Kas1	<b>Kpn1</b>	<b>Mfe1</b>	Msc1	Nae1	Nar1	Nco1	<b>Nde1</b>
NgoM4	<b>Nhe1</b>	<b>Not1</b>	Nsi1	PflF1	<b>PflM1</b>	<b>Pml1</b>	polyA	<b>PshA1</b>	Psi1	PspOM	Pst1	Pvu2	Rsr2
Sac1	<b>Sac2</b>	<b>Sall</b>	SanD1	Sap1	<b>Sbf1</b>	<b>Scal</b>	<b>SexA1</b>	<b>Sfi1</b>	Sma1	<b>SnaB1</b>	SpAcc	SpDon	Sph1
Ssp1	Stu1	<b>Xba1</b>	Xcm1	<b>Xho1</b>	<b>Xmn1</b>								

Unique:

<b>Acc65</b>	<b>Afe1</b>	<b>Afl2</b>	<b>Age1</b>	<b>Ase1</b>	<b>Bcl1</b>	<b>BsrD1</b>	<b>BsrG1</b>	<b>Bts1</b>	<b>_Chi</b>	<b>Clal</b>	<b>EcoR1</b>	<b>Fsp1</b>	<b>Hpa1</b>
<b>Kpn1</b>	<b>Mfe1</b>	<b>Nde1</b>	<b>Nhe1</b>	<b>Not1</b>	<b>PflM1</b>	<b>Pml1</b>	<b>PshA1</b>	<b>Sac2</b>	<b>Sall</b>	<b>Sbf1</b>	<b>Scal</b>	<b>SexA1</b>	<b>Sfi1</b>
<b>SnaB1</b>	<b>Xba1</b>	<b>Xho1</b>	<b>Xmn1</b>										

Not found:

Acl1	Asc1	AsiS1	Baela	Baelb	BbvC1	BcglA	Bcglb	Bpu10	BsiW1	BsmB1	BssH2	BstE2	BstZ1
EcoK	EcoRV	FCatB	FCatL	FCatR	FCatP	ScFRT	Fse1	FspA1	I_Ceu	loxP	Mlu1	Nru1	Pac1
Pme1	Pvu1	R4atB	R4atL	R4atP	R4atR	Sgf1	SgrA1	Spe1	Srf1	Swa1	T3RNA	T7RNA	T7Ter
PISce													

Excluded by site complexity:

Acc1	Acil	Afl3	Alu1	Alw1	Apo1	Ava1	Ava2	Ban1	Ban2	Bbv1	BceA1	Bfa1	Bme15
BsaA1	BsaH1	BsaJ1	BsaW1	BseM2	BsiE1	BsiH1	Bsl1	BsmA1	BsmF1	Bsp12	BspCa	BspCb	Bsr1
BsrF1	BssK1	BstF5	BstN1	BstU1	BstY1	Btg1	Cac8	CviJ1	Dde1	Eae1	EcoO1	Fau1	Fnu4H
Fok1	Hae2	Hae3	Hga1	Hha1	Hinc2	Hinf1	HinP1	Hpa2	Hph1	Hpy99	Hpy1	Hpy3	HpyC3
HpyC4	HpyC5	Mae3	Mbo2	Mnl1	Mse1	Msl1	MspA1	Mwo1	Nci1	Nla3	Nla4	Nsp1	Ple1
PpuM1	Rsa1	Sau3A	Sau96	SfaN1	Sfc1	Sml1	Sty1	Taq1	Tat1	Tfil	Tse1	Tsp45	Tsp50
TspR1													