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|----- SP -----|          |----- SUB domain ----|
|-----|          |----- loop -|
|          |          |sub-6/T-DNA|
|          |          |R29*   |
          F9L   G11V         S22T
          |   |             |
SUB/SRF9  1  MSFTRWE---VFFG-LSVIALTMP-FSAGVTNLRDVSATNNLYITLGAP-SLHHWLAFFGG
SRF1      1  MRSGRDN-NICFLGFLSFALISLPSLSLALTNPDDVAAINSLFLALESP-LLPGWVASGG
SRF3      1  MAAKRSIYCLLLLPLLLSLLIWIWPSISLAATNPDDVAAINGLFALALGAP-VLPGWIASGG
SRF6      1  ----MRENWAVVALFTLCIVGFELRFIHGATDASDTSALNTLFSGMHSPAQLTQWTAAGG
SRF7      1  ----MTENRVVIALLLCIVGFEPFIFHGATDSSDTSALNIMFSSMNSPGQLSQWTAAGG
SRF8      1  MAIGDRAMFTVLLLFITASISGFS--VVRVCTDPSDVQALQVLYTSLNPSQLTNWKNNGGG
SRF4      1  ----MGPNLQRTIVLVFIACFGIFTSVVLAKTDSQDVSNLDAYKSMNSPKLKGWSSSGG
SRF5      1  -----MTQKLVRLVIVSLAIVTVLLOAKTNDQEVSNLNVMFDSLNSPKLKGWKANGG
SRF2      1  ----MKTKQQIRFLATILLTITLFLVLAKTDDPLEVLALQDLYKSLRNPEQLRGWRLEGG

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-- SUB domain -----|
-----βββ|----- LRRa -----|----- LRRI -----|
          sub-10   sub-3   sub-11
          C57Y    V64M    S69L
          |       |       |
          |  xWxGVxC |
SUB/SRF9  55  DPCGKRWQGVVCDSSNITEIRIPGMKVGGGLS-DTLADFSSIQVMDFSSNHISGTIPQAL
SRF1      59  DPCGGSWQGVLCNASQVETIILLISANLGGELG-VGLNMFISLKAMDFSSNNHIGGSIPSTL
SRF3      60  DPCGEAWQGIICNVSDIISITVNAANLQGGELG-DNLAKFTSIRGIDFSNRRIGGSIPSTL
SRF6      57  DPCGQNRWRGVTCSGSRVTQIKLQSLGSLGTLGGYMLDKLTSLTELDLSSNNLGGDLDPYQF
SRF7      57  DPCGQNRWKGITCSGSRVTQIKLPSGLSGSLG-FMLDKLTSVTEFDMSSNNLGGDLDPYQL
SRF8      59  DPCGESWKGITCEGSAVVTIDISDLGVSGLG-YLLSDLKSLRKLDSVSGNSIHDLPYQL
SRF4      57  DPCGDSWDGITCKGSSVTEIKVSRGLSGSLG-YQLGNLKSILTYLDVSKNNLNGNLPYQL
SRF5      54  DPCEDSWEGVKCKGSSVTEIQLSGFELGGSRG-YLLSNLKSILTYLDVSKNNLNGNLPYQL
SRF2      57  DPCGEAWLGISSGSSVVDLQRLKLLGSLG-NQLQHLLHNLKILDVSNFNNLEGEIIPFGL

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-||----- LRRII -----||----- LRRIII -----||----- LRRIV -----|
          sub-1
          S121--*
          |
SUB/SRF9  114 PSSIRNLSLSNRFTGNIPFTLSFLSDLSELSLGSNLLSGEIPDYFQQLSKLTKLIDLSSN
SRF1      117 PVSLQNLFLSGNNFTGITPELSSLKLSVMSLNLLSGKIPDFVQDLGLMINIDLSSN
SRF3      118 PVTLQHFELSANQFTGSIPELGLTSLFLNDMSLNDNLLSGELPDVFQNLVGLINIDLSSN
SRF6      116 PPNLQRNLANNQFTGAASYSLSQITPLKYNLGHNQFKGQIADFDLDSLTLTDLDFSN
SRF7      115 PPNLERLNLANNQFTGSAQYSISMAMPKYLNLAHNQLK-QLAIDFTKLTSLSLDLSSN
SRF8      117 PPNLTSNLARNLNSGNLPYSISAMGSLSYMNVSNGSLTMSIGDIFADHKSLATLDSLHN
SRF4      115 PDKLTYLDGSENDENGNVPSVSLMNDLSYLNLRNLLNGELSDMFQKLPKLETIDLSSN
SRF5      112 PPNLANLDFSENELDGNVPYSLSQMKNLQSLNLGONKLNELPDMFQKLSKLETDLDFSLN
SRF2      115 PPNATHINMAYNLTQSIPFSLPLMTSLSLNLNLSHNSLGPVGNVFSGLQ-IKEMDLDFSN

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-----||----- LRRV -----||----- LRRVI -----|
          sub-9/T-DNA   sub-12
          D196--*      S222L
          |           |
SUB/SRF9  174 ILEGHLPSSMGDLASLKILYLQDNKLTGTLQDVEIIDL-FLTDLNVENNFLSGPIPPNLLKI
SRF1      177 NLSGPIPPSMQNLSTLTSLLLQNHLNLSGELDVLQDL-PLKDLNVENNFLNGPIPEKLLSI
SRF3      178 NISGTLPPSMENLLTLTLRVQNNQLSGTLQDLVLAGL-PLQDLNIENNFLSGPIPKLLSI
SRF6      176 SFTNSLPATFSSLTSLKSLYLQNNQFSQTVAVLAGL-PLETLNIANNDFTGWIPSSKGI
SRF7      174 AFTGSLPNTCCSLSAKSIYLNQNNQFSGTIDILATL-PLENLNIANNRFTGWIPDSKGI
SRF8      177 NFSGDLPSSLSSTVSLSVLYVQNNQLTGSIDVLSGL-PLKTLNVANNHFNKSIPEKLLSI
SRF4      175 QLTKGLPQSIFANLTLGLKILHLQENQFKGSINALRDLPQIDVNVANNQFTGWIPNELKNI
SRF5      172 KLSGKLPQSIFANLTLKLLHLQDNRFTGDINVLRLN-AIDDLNVEDNQFEGWIPNELKDI
SRF2      174 NLTGDLPPSFGTLMNLTSLYLQNNRLTGSVLYLADL-PLADLNIENDFSGIIPSHFQSI

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sub-17 sub-18 T486E
S466L P473L T486A T494A

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SUB/SRF9 466 SKRAAHFPPGLNSSS-----SATVFTIASLQOYTNNFSEENIIGEGSIGNVYRAELRHG
SRF1 440 PAEASLKRRTTSKSHG---PLTAVKHFTVASLQOHTNSFSHENLIGTGMLGSVYRAELPGG
SRF3 447 MPIISPERPVKKTSPKRLPLTSVKHYSIASLQOYTESFAQENLIGSGMLGSVYRARLPNG
SRF6 385 KPIAVKKSTVVVPSN-----VRLYSVADLQIATGSFSDNLLGEGTFGRVYRAEFDDG
SRF7 388 KPIVAKKAADVVPNS-----VNTYTVSDLQVATNSFSDNLLGEGTFGRVYRAQFEDG
SRF8 367 NGSISRIRSPITAS-----QYTVSSLQVATNSFSQENIIGEGSLGRVYRAEFPNG
SRF4 386 RSSTSQDSPDTRGVK-----AFSLADLQNTASCFSQPNRLLGEGTIGRVYKAKFQDG
SRF5 377 LNAKRTTS--TRSAV-----EFELSDLQSATANFSPGNLLGEGSIGRVYRAKYSDG
SRF2 384 ARRKSFSATCQYPSF-----AKLFSAAELQLATNCFSEENLLGEGPLGSVYRAKLPDG

II III IV V

sub-19
K525E E539A S545F

* * | | * |

SUB/SRF9 520 KEFVAVKKLNSNTINRTQSDGEFNLNLSNVLKLRGHILELLGYCNEFGORLLVYEYCPNGS
SRF1 497 KEFVAVKRLDKKSPNHEEEGKFELELVNNDIRIRHANIVQLVGFCEHSQRLLIHEYCRNGT
SRF3 507 KEFVAVKRLDKRASEQQQDHEFIELVNNDIMIRHSNIVELVGYCAEHDORLLVYEYCSNGT
SRF6 438 KVLAVKKIDSALPHGMTDDFIEMVSKIANLDHPNVTKLVGYCAEHGQHLVVYEFHKNGS
SRF7 441 KVLAVKKIDSALPTDADDFTETVSKIAHLDHENVTKLDGYCSEHGQHLVVYEFHRNGS
SRF8 417 KIMAKKIDNAALSLOEEDNFLEAVSNMSRLRHPNIVPLAGYCTEHGORLLVYEYVGNNG
SRF4 437 RKEFAVKEIDSLLGKGNPEEFESHIVSSISSIHHKNMAELVGYCSEQGRNMLVYEYFTSGS
SRF5 426 RTLAVKKIDSTLFDGKSEGITPIVMSLSKIRHQNIAELVGYCSEQGHNMLVYEYFRNGS
SRF2 437 QFAVAVNIPMSLSLHEEEQFTEVLIQTASKLRHPNIVTLIGFCIENGEHLLVYEYVGHLS

VIa VIb

sub-4 sub-20
T595N R599C L633F

* | * * * * * * * *

SUB/SRF9 580 IQDALHLDRKHLKLTWNVRINIALGASKALQFLHEVCQPPVVHQNFKSSKVLDDGKLSV
SRF1 557 LHDLLHIDDRKIELSWNVRVRIALAAKALEYLHEICDPPSIHRNFKSANILLDDDIRV
SRF3 567 IQDGLHSDDEFKFKLSWNTRVSMALGAARALEYLHEVCPEPPIHRNFKSANVLLDDLSV
SRF6 498 LHDFLHLSSEESKALVWNSRVKIALGTARALEYLHEVCSPSIVDKNIKSANILLDSELNP
SRF7 501 LHDFLHLAEEESKPLIWNPRVKIALGTARALEYLHEVCSPSIVHKNIKSANILLDSELNP
SRF8 477 LDDTLHTNDRSMNLTWNARVKVALGTAKALEYLHEVCLPSIVHRNFKSANILLDEELNP
SRF4 497 LHRFLHLSDDFSKPLTWNTRIRIALGTAKALEYLHETCSPPLVHKNIKSSNILLDNEELNP
SRF5 486 LHEFLHLSDCFSKPLTWNTRVRIALGTARAVEYLHEACSPVMHKNIKSSNILLDADLNP
SRF2 497 LYNAH--DEVYKPLSWGLRLRIAIGVARALDYHSSFCPPIAHSDLKATNILLDEELTP

|----- activation segment -----|

VII VIII IX

sub-8/T-DNA E667D
E665--*

S656A * * * * * * |

SUB/SRF9 640 RVADSGLAYMIPRPTSQMG-----YAAPEVEY-GSYTCQSDVFSLGVMLELL
SRF1 617 HVSDCGLAPLISGGAVSOLSGQ---LLAAYGYGAPEFEY-GIYTMKCDVYSGVMLELL
SRF3 627 LVSDCGLAPLISGVSOLSGQ---LLAAYGYGAPEFDS-GIYTWQSDVYSGVMLELL
SRF6 558 HLSDSGLASFPT-ANELLNQT---DE---GYSAPVSMGQYSLKSDIYSGVMLELL
SRF7 561 HLSDSGLASFPT-ANELLNQN---DE---GYSAPETSMSGQYSLKSDVYSGVMLELL
SRF8 537 HLSDSGLAALTPN-TERQVSTQ---VVGSGFYSAPEFALSGIYTVKSDVYTFGVMLELL
SRF4 557 RLSDYGLANFHHRTSONLGVG-----YNAPECTDPSAYTPKSDVYSGVMLELL
SRF5 546 RLSDYGLSKFYLRSONLGEF-----YNAPEARDPAYTPKSDVYSGVMLELL
SRF2 555 RIAACGLASLRPLTNSVSKLRASEIAIQNTGYIAPEHGQPGSSGTSKSDTYALGVLLLELL

X

SUB/SRF9 689 TGRKPFDRTRPRGHQTLAQWAI PRLHDIDALTRMVDPSLHGAYPMKSLSRFADII SRSLQ
 SRF1 673 TGRKSYDKKRD RGEQFLVRWAI POLHDIDALAKMVDPSLKG DYPAKSLSHFADVISRCVQ
 SRF3 683 TGRMSYDRDRSRGEQFLVRWAI POLHDIDALGKMVDPSLNGQYPAKSLSHFADII SRCVQ
 SRF6 611 TGRKPFDS TRSRSEQSLVRWAI POLHDIDALAKMVDPALKGLYPVKSLSRFADVIALCVQ
 SRF7 614 TGRKPFDS TRSRSEQSLVRWAI POLHDIDALGKMVDPALKGLYPVKSLSRFADVIALCVQ
 SRF8 593 TGRKPLDSSRTRAEQSLVRWAI POLHDIDALS KMVDPSLNGMYPKSLSRFADII IALCTQ
 SRF4 607 TGRKPYDSGRPKAEQSLVRWAKPOLKDMDTLDEMVDPALCGLYAPESVSSSFADIVSICVM
 SRF5 596 TGRVYDFDGEKPRPERSLVRWAI POLHDIDALSNIADPALHGLYPPKSLSRFADII IALCVQ
 SRF2 615 TGRKAFDSSRPRGEQLLVKWASTRLHDRRSLEQMI DGGIAGTFSSRVASQYADIISLCTQ

XI -- |

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SUB/SRF9 749 MEPCFRPPISEIVQDLQHMI -----
 SRF1 733 SEPEYRPLMSEVVQDLSDMIQREHRRN-DSNGDNQYTGRR-----
 SRF3 743 SEPEFRPLMSEVVQDLDMI RRRERHSGDSTAD-----
 SRF6 671 PEPEFRPPMSEVVQALVVLVQRANMSKRTVGVDPSQRAGSADTTSDYM-----
 SRF7 674 PEPEFRPPMSEVVQALVVLVQRANMSKRTVGVG----SGSSGVN-DYM-----
 SRF8 653 PEPEFRPPMSEVVQQLVRLVQRASVVKRRSSD----TGFSYRTPEHEHVDISF-----
 SRF4 667 TEPGLRPPVSNVVEALKRLV-----
 SRF5 656 VEPEFRPPMSEVVEALVRMVQRSSMKLKDDLSSSYRAHDDYDY-----
 SRF2 675 AEKKEFRPPVSEIVEALTALIQKONKEASSSVADKTDPFKSKSFCSTRTRFISSPTFSYLSS