

NonO-TFE3 MGSNKTFNLEKQNHTPRKHHQHQQHQQQQQPPPPPIPANGQQASSQNEGLTIDLK 60
 Wild-typeTFE3 -MSHA-----AE----PA--RDGVEASAEGPRA--VFLLE 27
 PRCC-TFE3 -MSLVAYA-----SSDESEPDEAEPEPEEEEEAVAPTS GPALGGLFASLP 43
 * : * . . : *
 NonO-TFE3 NFRKPGKFTFTQRSRLFVGNLPPDITEE-EMRKLFEKYGKAGEVFIHKDKGFGFIRLETR 119
 Wild-typeTFE3 ERRPADSAQLLSLNSLLP--E-SGIVADIELENL-----DPDSFYELKSQPL 72
 PRCC-TFE3 --APKGP-----ALLP--PPPQMLAPAFPPLL-----LPPPTGDPRLQ-- 78
 . *: : :: : :

Rag binding

NonO-TFE3 TLAEIAKVELDNMPLRGKQLRVRFACHSASLTVRNLPQYVS---NELLEEAFSVFGQVE 175
 Wild-typeTFE3 PLRSSLPLISLQATPATPATLSA----SSSAGGSRT PAMSSSSSRVLLRQ-----QLM 121
 PRCC-TFE3 -PPPPLPFGLGGFPVSPVSPA-----E-AAGV----- 104
 . * * . :

NonO-TFE3 RAVVIVDDR-G-RPSGKGIVFSGKPAAR-KAL---DRCSEGSFLLTTFPRPVT-VEPMD 228
 Wild-typeTFE3 RAQAQEQERREERREQAAAA-PF-PSPAPASPAISVVG-VSAGGHTL-SRPPPA-----Q 171
 PRCC-TFE3 -----GEGL-GL-GLPSRPGPLNLPPPIGGAGPPL-GLPKPKKRKEPVK 146
 . . : *: . : . . * * * .

PRCC-TFE3 breakpoint

NonO-TFE3 QLDDEEGLPEKLVIKNQQFHKEREQPPRFAQPGSF EYAYMRWKAL IEMEKQQDQVDRN 288
 Wild-typeTFE3 -----VPREVL---KVQTHLENTRY-----HLQQARR-----QQVKQY 202
 PRCC-TFE3 IA----APELHKG---DVQTHLENTRY-----HLQQARR-----QQVKQY 180
 .. : . * * * : . : * * : * * :

Gsk3β mTOR

NonO-TFE3 IKEA-REKLEMEMEARHEHQVLMRQDL MRRQEELRRMEELHNQEV-----QKRKQLE 341
 Wild-typeTFE3 LSTTLGPKLAS-----QALTPPPGP-ASAQPLPAPEAAHTTGPTGSAPNSPSMALLT 252
 PRCC-TFE3 LSTTLGPKLAS-----QALTPPPGP-ASAQPLPAPEAAHTTGPTGSAPNSPSMALLT 230
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NonO-TFE3 breakpoint

NonO-TFE3 LRQE--EERRRREEE---MRRQEE MRRQQEGFK-GTFPDALPVSGNLLDVYSSQGVA 394
 Wild-typeTFE3 IGSSSEKEIDDVIDEII SLESSYNDEMLSYLPGGTTGLQLPSTLPVSGNLLDVYSSQGVA 312
 PRCC-TFE3 IGSSSEKEIDDVIDEII SLESSYNDEMLSYLPGGTTGLQLPSTLPVSGNLLDVYSSQGVA 290
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mTOR and 14-3-3 binding

NonO-TFE3 TPAITVSNSCPAELPNIKREISET EAKALLKERQKKDNHNL IERRRRFNINDRIKELGTL 454
 Wild-typeTFE3 TPAITVSNSCPAELPNIKREISET EAKALLKERQKKDNHNL IERRRRFNINDRIKELGTL 372
 PRCC-TFE3 TPAITVSNSCPAELPNIKREISET EAKALLKERQKKDNHNL IERRRRFNINDRIKELGTL 350

NonO-TFE3 IPKSSDPEMRWNKGTILKASVDYIRKLQKEQQRSKDLESRQRSLEQANRSLQLRIQELEL 514
 Wild-typeTFE3 IPKSSDPEMRWNKGTILKASVDYIRKLQKEQQRSKDLESRQRSLEQANRSLQLRIQELEL 432
 PRCC-TFE3 IPKSSDPEMRWNKGTILKASVDYIRKLQKEQQRSKDLESRQRSLEQANRSLQLRIQELEL 410

NonO-TFE3 QAQIHGLPVPPTPGLLSLATT SADSLSKPEQLDIEEGRPGAATFHVGGGPAQNAPHQQP 574
 Wild-typeTFE3 QAQIHGLPVPPTPGLLSLATT SADSLSKPEQLDIEEGRPGAATFHVGGGPAQNAPHQQP 492
 PRCC-TFE3 QAQIHGLPVPPTPGLLSLATT SADSLSKPEQLDIEEGRPGAATFHVGGGPAQNAPHQQP 470

NonO-TFE3 PAPPDALLDLHFPSDHLGDLGDPFHLGLEDILMEEEGVVGGLSGGALSPLRAASDPLL 634
 Wild-typeTFE3 PAPPDALLDLHFPSDHLGDLGDPFHLGLEDILMEEEGVVGGLSGGALSPLRAASDPLL 552
 PRCC-TFE3 PAPPDALLDLHFPSDHLGDLGDPFHLGLEDILMEEEGVVGGLSGGALSPLRAASDPLL 530

PKCβ PKCβ

NonO-TFE3 SSVSPAVSKASRRSSFSMEEES 657
 Wild-typeTFE3 SSVSPAVSKASRRSSFSMEEES 575
 PRCC-TFE3 SSVSPAVSKASRRSSFSMEEES 553
