

p53\_Tetraodon\_miurus -MEEENIS---LPLSQDTFQDLWDN---VSAPPISTIQTAALENEAWP 41  
p53\_Platicthys\_flesus -MDEQGLDGMQILPGSQDSFSELWAS---VQTPSIATI----- 34  
p53\_Xiph\_maculatus -MEEADLT---LPLSQDTFHDLWNN---VFLSTENES----- 30  
p53\_Xiph\_hellerii -MEEADLT---LPLSQDTFHDLWNN---VFLSTENES----- 30  
p53\_Danio\_riero -----MAQN-DSQFAELWEK--NLIQPPGGGSCWDIINDE--- 34  
p53\_Barbus -----MAE---SQFAELWER--NLISTQEAG-TCWELIND--- 30  
p53\_Ictalurus MEGNGERDTMMVEPPDSQFAELWLR--NLIVR---DNSLWGKEE--- 41  
p53\_rainbow\_trout ---MADLAENVSLPLSQESFEDLWKMNLNLVAVQPPETESVWVGYDNFMME 47

p53\_Tetraodon\_miurus AERQNMNMCNFMDFSTFNEALFNLLPEPPSRDGANSSSPVTPVTTDYPGEY 91  
p53\_Platicthys\_flesus AEEFDDHLGNLLQNGFDMNLELPEPMVAKDSVTPPSSVTPVTTDYPGEY 84  
p53\_Xiph\_maculatus LPPPEGLLSQNM-----FWEDPETMQETKNVPTAPTVPAINSYAGEH 73  
p53\_Xiph\_hellerii LAPPEGLLSQNM-----FWEDPETMQETKNVPTAPTVPAINSYAGEH 73  
p53\_Danio\_riero EYLPGSFDPNFENVLEE---QPQST-----LPPTSTVPETSDYPGDH 75  
p53\_Barbus EYLPSSFDPNIFDNVLTE---QPQST-----SPTASVVPVATDYPGEH 71  
p53\_Ictalurus --IPDDLQEVPCDVLSDM-LQPQSS-----SPTSTVPVTSVDPGILL 82  
p53\_rainbow\_trout APLQVEFDPSELEVSATEP--APQPSISTLDTGSPPTSTVPTTSDYPGAL 95

p53\_Tetraodon\_miurus GFKLRFQKSGTAKSVTSTYSEILNKLYCQLAKTSLVEVLLGKDPMPGAVL 141  
p53\_Platicthys\_flesus GFQLRFQKSGTAKSVTSTFSELLKLYCQLAKTSPVEVLLSKEPPQGAVL 134  
p53\_Xiph\_maculatus GFNLEFNDSGTAKSVTSTYSVKLGKLFQQLAKTTPIGVLVKEEPPQGAVI 123  
p53\_Xiph\_hellerii GFNLEFNDSGTAKSVTSTYSVKLGKLFQQLAKTTPIGVLVKEEPPQGAVI 123  
p53\_Danio\_riero GFRLRFQKSGTAKSVTCTYSPDLNKLFCQLAKTCPVQMVVDVAPPQGSVV 125  
p53\_Barbus GFKLGFQKSGTAKSVTCTYSSDLNKLFCQLAKTCPVQMVVNVAPPQGSVI 121  
p53\_Ictalurus NFTLHFQESSGTAKSVTCTYSPDLNKLFCQLAKTCPVMAVSSSPPPGSVL 132  
p53\_rainbow\_trout GFQLRFLQSSGTAKSVTCTYSPDLNKLFCQLAKTCPVQIVVDHPPPPGAVV 145

p53\_Tetraodon\_miurus RATAIYKKTEHVAEVVRCPPHQN----EDSAEHRSHLIRMEGSERAQYF 187  
p53\_Platicthys\_flesus RATAVYKTEHVADVVRCPHHQT----EDTAEHRSHLIRLEGSQRALYF 180  
p53\_Xiph\_maculatus RATAVYKTEHVGVEVVKCPHHQS----EDLSDNKSHLIRVEGSQLAQYF 169  
p53\_Xiph\_hellerii RATSVMYKTEHVGVEVVKCPHHQS----EDLSDNKSHLIRVEGSQLAQYF 169  
p53\_Danio\_riero RATAIYKSEHVAEVVRCPPHERTPDG-DNLAPAGHLIRVEGNQRANYR 174  
p53\_Barbus RATAIYKSEHVAEVVRCPPHERTPDG-DGLAPAAHLIRVEGNSRALYR 170  
p53\_Ictalurus RATAVYKRSEHVAEVVRCPPHERSNDSSDGPAPPGHLLRVEGNSRAVYQ 182  
p53\_rainbow\_trout RALAIYKSLDADVVRCPHHQSTSENNEGPAPRGHLVIRVEGNQRSEYM 195

p53\_Tetraodon\_miurus EHPHTKRQSVTPVYEPPLGSEFTTILLSFMCNSSCMGGMNRRPILTIIT 237  
p53\_Platicthys\_flesus EDPHTKRQSVTPVYEPPLGSETTAILLSFMCNSSCMGGMNRRQILTIIT 230  
p53\_Xiph\_maculatus EDPNTRRHSTVTPYERPLGSEMTTILLSFMCNSSCMGGMNRRPILTIIT 219  
p53\_Xiph\_hellerii EDPNTRRHSTVTPYERPLGSEMTTILLSFMCNSSCMGGMNRRPILTIIT 219  
p53\_Danio\_riero EDNITLRLSVEFVPEPQLGAEWTTVLLNYMCNSSCMGGMNRRPILTIIT 224  
p53\_Barbus EDDVNSRHSTVTPYEPPLGSEFTTVLYNFCNSSCMGGMNRRPILTIIS 220  
p53\_Ictalurus EDGNTQAHSTVTPYEPPLGVSQSTTVLYNYMCNSSCMGGMNRRPILTIIT 232  
p53\_rainbow\_trout EDGNTLRHSTVTPYEPPLGSECTTVLYNFCNSSCMGGMNRRPILTIIT 245

p53\_Tetraodon\_miurus LETQEGIVLGRRCFEVRVCACPRDRKTEETNS-----TKMQNDAKDA 280  
p53\_Platicthys\_flesus LETPDGLVLGRRCFEVRVCACPRDRKDEESS-----TKTPNGPKQT 273  
p53\_Xiph\_maculatus LETTEGEVLGRRCFEVRVCACPRDRKTEEGNL-----EKS--GKQQT 260  
p53\_Xiph\_hellerii LETTEGEVLGRRCFEVRVCACPRDRKTEEGNL-----EKS--GKQQT 260  
p53\_Danio\_riero LETQEGQLLGRRSFEVRVCACPRDRKTEESNFKKQDET--KTMAKTTTG 272  
p53\_Barbus LETHDGQLLGRRSFEVRVCACPRDRKTEESNFKKQDET--KTLDKIPSA 268  
p53\_Ictalurus LETQDGHLLGRRTFEVRVCACPRDRKTEESNFKKQDEP--KTSKTLT- 279  
p53\_rainbow\_trout LETQEGQLLGRRSFEVRVCACPRDRKTEEINLKKQDETTLETKTKPAQG 295

p53\_Tetraodon\_miurus KKRKSVPT---PDSTTIKSKTASSAEEDNNEVYTLQIRGKRYEMLKKI 327  
p53\_Platicthys\_flesus KKRKQAPSNSAPHTTTVMKSKSSSSAEEDKEVFTVLVGRERYEIIKKI 323  
p53\_Xiph\_maculatus KKRKSAPA---PDTSTAKSKSASSGEDEDKEIYTLIRGFRNYLWFKSL 307  
p53\_Xiph\_hellerii KKRKSAPA---PDTSTAKSKSASSGEDEDKEIYTLIRGFRNYLWFKSL 307  
p53\_Danio\_riero TKRSLVKESSSATLRPEGSKAKGS--SSDEEIFTLQVRGRERYEILKKL 320  
p53\_Barbus NKRSITKDSSTSSVPRPEGSKAKLSG--SSDEEIFTLQVRGRERYEMLKKI 317  
p53\_Ictalurus -KRSMKPPS---HPEASKSKNS--SSDEEIFTLQVRGRERYEFLKKI 322  
p53\_rainbow\_trout IKRAMK-EASLPAPQPGASKKTSSPAVSDEEIFTLQIRGKRYEMLKKF 344

p53\_Tetraodon\_miurus NDGLD-----LLENKPKSKATHR-----PDGPIPPSGKRLLRGE- 362  
p53\_Platicthys\_flesus NEAFEG-----AAEKEKANVAVK-----QELPVPSSGKRLVQRGE- 360  
p53\_Xiph\_maculatus NDGLE-----LMDKTGPKIK-----QEIPAPSSGKRLLRGG- 338  
p53\_Xiph\_hellerii NDGLE-----LMDKTGPKIK-----QEIPAPSSGKRLLRGG- 338  
p53\_Danio\_riero NDSLELSDVVPASDAEKYRQKFMK--NKKENRESSEPKQKKLMVQDEG 368  
p53\_Barbus NDSLELSDVVPSEMDRYRQKLLTK--GKKKDGQTPPKRGGKLMVKDE- 364  
p53\_Ictalurus NDGLELSDVVPADQEKYRQKLLSKTCRERDGAAGEPKRGGKRLVKEE- 371

p53_rainbow_trout	NDSLELSELVFVADADKYRQKCLTKRVAKRDFGVG--PKKRKLLVKEE- 391
p53_Tetraodon_miurus	KSDSD 367
p53_Platicthys_flesus	RSDSD 365
p53_Xiph_maculatus	-SDSD 342
p53_Xiph_hellerii	-SDSD 342
p53_Danio_rerio	RSDSD 373
p53_Barbus	KSDSD 369
p53_Ictalurus	KCDSD 376
p53_rainbow_trout	KSDSD 396