

G1WRKY1, gi|29249388|gb|EAA40901.1|, [*Giardia lamblia*]
MKEGSLHDLGEPIELSVVSQYADKHEPLPGAIGAGGHQNASGVHHQMDVSVHTLTSTISADLYNHNSFGRE
RINPVPTLSYGERLPAASSVSDKYLRQITGFDASQAMDLPALSGNLPVAVSYLPSSTLPLCLPLSAANMGVS
QIVERAAFIAPSNLQANSDLGQNSNGISVQSIPIHIPISGLLPKHAHDFPRDGTLSPASSDDSGIGSSSF
LCSDMQSSCPITSTSSAFQSSRSQSVSLAAPGPIPPSTPSLISRFSFGASRPNISAKDLQTSVLSLSSQTR
SATKSFTLLGDSLGSGAPSQDGSSTLVASATVSEPRSLRKATRRVECSIRKTTTTERVTIRELPADGYC**WR**
KYGSKRLPNNSHPKSYFRCSVPGCQAKRYVTETDNRVLKTEYIGE**HN**HGKSSSTTHEATSLADVCRLAAL
GQNFLIKSDLSLSVLSKTFLLDLAVLLRPSIFNNDYLILNGFGSIVLDDSDKRYRDPINGHEIIEISDSIY
PLSALTSMVMTFFAKGVELSNAVNLAITQLNKSFREKAMYAIRKQDSRGRNHSDSSSLVAIPGEDPSTKG
SSAHAPRGRKLIISCKLPSYDQIESSIDFFR**WKYGH**KPQTDTRLDSKSYRCAFFN**CPARR** TITFFYSL
SSDGTETVESVIVQYEN**QH**THPPDRTRIPYKDCCLKLLKAPDHLPIQPIRSPDHPIFANPTSYLGVTVTV
AQRPVFTSLTPHMTAPIGDPAHHPIAMQHGMPAQASHGISDINTVTHGAQLVSSMQRSDSFERTSCLLF
PRVDSMALQEGSLGLHTDQSLYGCASGSPGYGASYPLATQPDCCSSYSLVRSNSFLFLNQLGQAQSLDQV
IDAGHSSTVSGSGSTSKIPISTPHSIHSSNMEKDLLSYCSTIVRGDENINLTNAENESISRMHDTLLGPM
VNVYS

DsWRKY1, gi|28829829|gb|AA052331.1|, [*Dictyostelium discoideum*]
MGAQYSTELNKYNNNNNNNNNNNNNNNNNNNNHTISGNENLNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NN
NN
IQNMIKSANQIKPGEKELVLFHKLHQSLENQSFSEELRNSSILSISPDKSFLTINEINVNNNNNNNNNN
NNNENNKVGVNGSSTTTTTTTTTTTTTNNNSNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
VDKPNKSAKLQKPKLKSNNLNDTNGGNSPQQNGKISKYMAKKLLALQQKQLEQEQQEQKQQKQQQQQQQQ
QQQQQQQQQQQQKDAIENNNNNNNKLQPIVKNSVNKTQKKNKTTHNVKQKITFLTNSDNEDEYDAS
DEYIDDDDDDEKYDDDDDEYFEGNNNNNYKKNNITNKSNNNNNNDESDSFSESEIFKQKKNLHDKNQS
PKQQLTSHSEFDNSLLKNQSRNNSKIQKLQIKEENYHQIQQEHGEKQQQQQQQQQQPQQQQQQQQQQQQ
QQQQEQVDKEQTEKIINTNKKEEQKPNDFPPIPTNPFKRDNETAFGKNNNNNNNNNNNNNNNNNNNNNN
NN
NN
PATTTTTTTTTTPTPLKQKKNKTNN
EENNSTQNN
FQGCNVRKQVERIGDTNQNSTVYKGE**HCHG**FPPQTRVVSDDQAFRNSVMFEGLDGNNNNNNNNNNNNNN
SSNSNNGNGNGNGNGNGNGNGNSNGNQDQNGNSFNDQNGDSPTQHGGQISPMNSPKNTIPTTTTTT
TSISTYVNTNSTNKKNSKQEKKISVKNETTDDDEFQEDIDQLSNNNNNNNNNNNNNNNNNNNNNNNNNN
NN
NN
QKSVKGSFPFKSYFK**CAELT**CPVKKQVIQQDSKYINTYRGK**HN**HDPESEAEIKRKKHFNGLYNNNNNNNN
NN
HNEIENNLIDD

ChrWRKY1, predicted by GENSCAN from scaffold_1387, [*Chlamydomonas reinhardtii*]
XFKRGSDWAPRTTTLFCFHYSRFRVSRGRCGRVAEQGENSPSALTVRQGVKVAPLTTPQQVEASPTTGIHQ
LCPPLFQPAQPARVPLPIPARTEAASAAPEPTRAIKREYEPRAGNGKQSVANSQGW**WRKYGE**KLVKGSP
NPRSYYK**CS**HPG**CLAKK**IVERSDSGTVLSTEYKGD**HCH**PAPS AVKASRFKPKPKTEPPVMVAPPVFS AV
DITVPNGFPFGANGRVGFPLSGGDMPLIPEALKSDFVPVPHAAGAAAHHDDTDTSEPEPAAALKAAPQDT
RAAQAAATAIRKVRDSAESPSCRLDMLAAYAEAAERQLKSSNSPEQGPSAKRQRTEAGAMRTRANPDDD
DDGSGAPSTSGMQRVVDITNMDDGYR**WRKYGQK**QVKGSPFPRAYYK**CTHMG**CSVRKHVERSAEDETRFFV
TYEGT**SH**R**L**PTGSRRRSARDMAEDDEDYEGEDAEDSSQPTSPQYGNVNGSGGPGQHAASKAAAQGAQL
VHPSGAQPASADFGQLQLSTSLASTVLQQAALSGVLPPLLQYNLSSEALASLGVNSEALQGVQQLNL
ASVGNLADLTNLLRQHAQMDLALAAQAIDAANANWDPLACLTTPRPNVSPAGQGHAMQAPSAGTGRQ
TKAAVFQKQVATTEA

Additional File 1. WRKY genes from *Giardia lamblia*, *Dictyostelium discoideum* and *Chlamydomonas reinhardtii*. WRKY domains are highlighted and the WRKYGQK or its variants and the zinc-finger motif are in colors.