

*Drosophila melanogaster*:

**FBpp0078442**

MSAMRHRPMAPPQQGPGAGTAGEHVSDNNFTDDESSPLTHDIYGGSQRTIQETKGWDVFRDPPIKIETGSTA  
NQECLELTVKILKIFAYVITFIIVLTGGVIAKGTMLFMTSQRVKDKKMEYCNKDLGRDKSFVRLPEEERVAWIWALLIA  
YALPEIGALIRSARICFFKTFKVPKTGHFLFVWLMESLSAVGMALLMFVLPQIDAIQGAMLTNCLCVPGIFGLLSRT  
SKEGKRFVKVIIDLAAVAQVTGLVIWPLENRRRELWVIVACVMISCGWWENYVSPQSPLGLVRLGRIKEEMKYT  
RYFCHIFLSIWKILLFFTVTLIIYWAQGEENLGFAMYGDAFGPHKIIVYELPAGLGGVLPDTLESANIDTVDVDAAYNT  
VVVYLLLQIFGAYLCYIFGKFACKILIQGFSYAFVSLVPLSVTLIAACGIRIDDPCCFFHDTIPDYLFFTSNFRFNNFVT  
EQMAWAWILWLLSQTWIALHIWTPKERCERLATTEKLFVQPMYSSLLIDQSMALNRRRDDQADVKTEDLSEIEKEKGD  
EYYETISVHTDRSSAPNKPSIKSSDNITRIYSCATMWHETKDEMIEFLKSIMRMDDEDQCARRVAQKYLRVLDPDYEF  
ETHIFFDDAFEISDHSDDDIQCNRFVLLIATMDEAASEIHQTTIRLRPPKKYPTPYGGRLVWTLPGKTKFITHLKDADR  
IRHRKRWSQVMYMYLLGHRLMELPISVDRKDAIAENTYLLTLDGDIDFKPNAVTLVLDLMKKNKLNLAACGRIHPV  
GSGPMVWYQLFEYAIGHWLQKATEHMIGCVLCSGPCFSLFRGKALMDDNVMKKYTRSDARHYVQYDQGEDR  
WLCTLLLQRGYRVEYSAASDAYTHCPEGFNEFYNQRRRWVWPSTIANIMDLLADAKRTIKINDNISLLYIFYQMMLMG  
GTILGPGTIFLMLVGAFAFRIDNWTFSHYNIVPILAFMFICFTCKSNLQFVAQVLSTAYALIMMAVIVGTALQLGED  
GIGSPSAIFLISMVGSFFIAACLHPQEFWCITCGLIYLLSIPSMYLLILYSIINLNVVSWGTREVVAKTKKELEAEKAAE  
EAKKRVKQKSMLSFLQSGIGDNGDEEGSVEFSLAGLFRICFTHGKTSDEKQQLTSIAESLDTIKHRMDTIESAVDPHG  
HHASRHGRRRTSSGSKDHHLLTSVAEKSGDESDESSTSAEPKQERDFLTNPYWIEDPDVRKGEVDFLSSTEIQF  
WKDLIDQYLYPIDNDPVEQARIAKDLKELRDSSVFAFFMINALFVLIVFLLQLNKDNIHVKWPFGVVRTNITYDESTQEV  
HISKEYLQLEPIGLVFVFFALILIIQFTAMLFRHFGTISHILASTEINFCKKSEDLTQDQLIDKHAVEIVKNLQRLQGIDG  
DYDNDSGSGPDRIARRKTIQNLKARQPRRQIGTLDVAFKFRFLKLTADAENNPATPILTRRLTMRAETIRALEVRKNS  
VMAERRKSAMQTLGAKNEYGITGAPINNGALPNQRSGRVSNAAGISIKDFVNVNGGGAEQIYGSNGGGTINQGY  
EHVIDEDGDGNSRLTRNPHPHHHQVSWGQNTNGGGNGTGRL

**FBpp0080086**

MDNHMDKNDKDEKSSSPDSQRQVVIYMPPAVEHGHVVYLKLDANLGTETEASAQLDPQEHLNADRENNRRISE  
LDDEPSTSAQSAVKGQKSEDDQGHQTKTGISKMPGSPKQLHNVLEVICRFSREIPDAMEGREQLQPAVIVQIPKYRE  
LGTQTAELPSQSQRRLDLTDLRDPNPPPCERTLHFTTISGNNLPGNPRQLRQTICARIGRSICDFVAFAFLCLQVKN  
DCVFCLGFFVAFVISASFLTAFFYRTLTFSSSPVRVAVANPVSGTMRYELATLRFNGGYYYIYNSSQKLL

**FBpp0089164**

MSAMRHRPMAPPQQGPGAGTAGEHVSDNNFTDDESSPLTHDIYGGSQRTIQETKGWDVFRDPPIKIETGSTA  
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YALPEIGALIRSARICFFKTFKVPKTGHFLFVWLMESLSAVGMALLMFVLPQIDAIQGAMLTNCLCVPGIFGLLSRT  
SKEGKRFVKVIIDLAAVAQVTGLVIWPLENRRRELWVIVACVMISCGWWENYVSPQSPLGLVRLGRIKEEMKYT  
RYFCHIFLSIWKILLFFTVTLIIYWAQGEENLGFAMYGDAFGPHKIIVYELPAGLGGVLPDTLESANIDTVDVDAAYNT  
VVVYLLLQIFGAYLCYIFGKFACKILIQGFSYAFVSLVPLSVTLIAACGIRIDDPCCFFHDTIPDYLFFTSNFRFNNFVT  
EQMAWAWILWLLSQTWIALHIWTPKERCERLATTEKLFVQPMYSSLLIDQSMALNRRRDDQADVKTEDLSEIEKEKGD  
EYYETISVHTDRSSAPNKPSIKSSDNITRIYSCATMWHETKDEMIEFLKSIMRMDDEDQCARRVAQKYLRVLDPDYEF  
ETHIFFDDAFEISDHSDDDIQCNRFVLLIATMDEAASEIHQTTIRLRPPKKYPTPYGGRLVWTLPGKTKFITHLKDADR  
IRHRKRWSQVMYMYLLGHRLMELPISVDRKDAIAENTYLLTLDGDIDFKPNAVTLVLDLMKKNKLNLAACGRIHPV  
GSGPMVWYQLFEYAIGHWLQKATEHMIGCVLCSGPCFSLFRGKALMDDNVMKKYTRSDARHYVQYDQGEDR  
WLCTLLLQRGYRVEYSAASDAYTHCPEGFNEFYNQRRRWVWPSTIANIMDLLADAKRTIKINDNISLLYIFYQMMLMG  
GTILGPGTIFLMLVGAFAFRIDNWTFSHYNIVPILAFMFICFTCKSNLQFVAQVLSTAYALIMMAVIVGTALQLGED  
GIGSPSAIFLISMVGSFFIAACLHPQEFWCITCGLIYLLSIPSMYLLILYSIINLNVVSWGTREVVAKTKKELEAEKAAE  
EAKKRVKQKSMLSFLQSGIGDNGDEEGSVEFSLAGLFRICFTHGKTSDEKQQLTSIAESLDTIKHRMDTIESAVDPHG  
HHASRHGRRRTSSGSKDHHLLTSVAEKSGDESDESSTSAEPKQERDFLTNPYWIEDPDVRKGEVDFLSSTEIQF  
WKDLIDQYLYPIDNDPVEQARIAKDLKELRDSSVFAFFMINALFVLIVFLLQLNKDNIHVKWPFGVVRTNITYDESTQEV  
HISKEYLQLEPIGLVFVFFALILIIQFTAMLFRHFGTISHILASTEINFCKKSEDLTQDQLIDKHAVEIVKNLQRLQGIDG

DYDNDSGSGPDRIARRKTIQNLEKARQPRRQIGTLDVAFKKRFLKLTADAENNPATPILTRRLTMRAETIRALEVRKNS  
VMAERRKSAMQTLGAKNEYGITTGAPINNNGALPNQRSGRVSNAGISIKDFNVNNGGGAEQIYGSNGGGTINQGY  
EHVIDEDGDGNSLRLTRNPHPHHQQVSWGQNTNGGGGNGTGRL

**FBpp0290640**

MSAMRHRPMAPPQGGPAGTAGEHVSDSDNNFTDDESSPLTHDIYGGSQRTIQETKGWDVFRDPPIKIETGSTA  
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YALPEIGALIRSARICFFKTFKVPKTGHFLFVWLMESLSAVGMALLMFVVLQIDAIQGAMLTNCLCVVPGIFGLSRT  
SKEGKRFVKVIIIDLAAVAAQVTGLVIWPLENRRRELWVIPVACVMISCGWWENYVSPQSPLGLVRLGRIKEEMKYT  
RYFCHIFLSIWKILLFFVTLLIYWAQGEENLGFAMYGDAGPHKIIYELPAGLGGVLPDTLESANIDTVDVDAAYNT  
VVYVLLLQIFGAYLCYIFGKFACKILIQGFSYAFVSLTVPLSVTLIAACGIRIDDPCFFHDTIPDYLFFTSNFRFNNFVT  
EQMAWAWILWLLSQTWIALHIWTPKERCERLATEKLFVQPMYSSLLIDQSMALNRRRDDQADVKTEDLSEIEKEKGD  
EYYETISVHTDRSSAPNPKSIKSSDNITRIYSCATMWHETKDEMIEFLKSIMRMDDEDQCARRVAQKYLRVLDPDYEF  
ETHIFFDDAFEISDHSDDDIQCNRVFKLLIATMDEAASEIHQTTIRLRPPKKYPTPYGGRLVWTLPGKTKFITHLKDADR  
IRHRKRWSQVMYMYLLGHRLMELPISVDRKDAIAENTYLLTLDGDIDFKPNAVTLVLDLMKKNKLNLAACGRIHPV  
GSGPMVWYQLFEYAIGHWLQKATEHMIGCVLCSGCFSLFRGKALMDDNVMMKYTTRSDERHYVQYDQGEDR  
WLCTLLLQRGRYVEYSAASDAYTHCPEGFNEFYNQRRRWWPSTIANIMDLLADAKRTIKINDNISLIFYQMMLMG  
GTILPGTIFLMLVGAFAFRIDNWTFSHYNIVPILAFMFICFTCKSNIQLFVAQVLSTAYALIMMAVIVGTALQLGED  
GIGSPSAIFLISMVGSFFIAACLHPQEFWCITCGLIYLLSIPSMYLLLILYSIINLNVVSWGTRREVAKTKKELEAEKAAE  
EAKKRVKQKSMFLQSGIGDNGDEEGSVFSLAGLFRCIFCTHGKTSDEKQQLTSIAESLDTIKHRMDTIESAVDPHG  
HHASRHGRRRTSSGSKDHLLTSVAEKSGDESDSDTSAEPKQERDFLTNPYWIEDPDVVRKGEVDFLSSTEIQF  
WKDLIDQYLYPIDNDPVEQARIASDLIELRNKSVFAFFMANALFVIVLFLQLNKDKLHIWPLGVKTNITYIETSEVHI  
SKEYLQLEPIGLVFFVFFALILIIQFTAMLFHRFGTISHILASTELNFCKKSEDLTQDQLDKHAVEIVKNLQRLQGDY  
DNDSGSGPDRIARRKTIQNLEKARQPRRQIGTLDVAFKKRFLKLTADAENNPATPILTRRLTMRAETIRALEVRKNSV  
MAERRKSAMQTLGAKNEYGITTGAPINNNGALPNQRSGRVSNAGISIKDFNVNNGGGAEQIYGSNGGGTINQGYE  
HVIDEDGDGNSLRLTRNPHPHHQQVSWGQNTNGGGGNGTGRL

**FBpp0300424**

MSGGDYDSGDYFMRSRKQRDKPSLWDSFQDPPSKTSGSDADWKKLQFCLKFKICTYLLVFAVVLATSVFANLIYLY  
MAGNTGGTGRVQVCSKYLLRHGQVEAVASELDQIAWVWALIFAFAPPELLTFLRALRICMFKREQRPSGLEVLVT  
LFELLHVVLGALLTFTVLPALDVTRGAILGCCVCFVALLNLLTGTRVRWRSADSLVLGSLALVAQGSVFLVWPSLSDS  
MEVQLLAIPLLISFRWWENFANTHEAIAIYIIRTRCTRSRYHTYLYLAPLKVLFVAGMGFILHGHEFVEYFGRFRDAWR  
PHLITLVQSNQDPDALLAQANVSITAPPRRTLFTMQSSPNSVFYALAAQVGAAYLCHIFGKFACKIKIQKFSYALPLSL  
AGPATVCLVFLAQLRASDPCSLHGFMPDYLSLLALGGSVEELGQRCLDYALWLWPLWVLAQVWVTLCHIWQPHND  
RNAPTEKLFVCPWYCGLLVDQCSMMNRIVDWSEELYAIKSDLTAPRDPVVALAADINASRDIQEEDKVPQLIVCAT  
MWHETEDEMMEFLKSIVRLDEDCARRMARTHLNNGKADDEYYELETNIFDDAFVSDPRQCQNKRNPPINEYV  
KTLTRTIDKAAFEVYGVNIRIKPPLKIETPYGGRLVWTLPGRTKMVAHLKNKDKIRHKKRWSQVMYMYLLGYRIME  
TKELSPRRKAVIAENTFILALDGDIDFQPRAVRLLIDRMKAVDELGAACGRIHPVGRGPMVWYQRFEYAIGHWLQKA  
TEHVIGCVLCSGCFSLFRASALMENSVMKRYTMISSEAMKMVQYDQGEDRWLCTLLLKAGSRVEYCAASDAYTH  
APESFNEFYNQRRRWWPSTIANIFDILADADTVVKKNNNSISTMYVWYQGMLMIGTVLPGTIFLMMV GALVAVFSI  
DIWTAFLWNFFPILLFILACVYLKQKQFQLLIAFVISSVYCLVMMMAVLIGIIVQMLEDGPLAPASLFFLLVAVQITIAGFMH  
PQEFWALLCGVIYITIPSMYMLLMIFSVMNDVSWGTRREAPVLKDDGKDAVDEANNYLPGLWLNPLLIDSELGE  
VSLMEQRFWKDLIKQYKPLELSREQKQAMADGLKELRNMIAFVVMVNAIFVLIVLFLQLKKEFLHLEWPIDPTDFV  
SFDRDNLVGIYRQYKELDPIGLCFVIFGLILIIQFLAMFFHRFATLQQLATTQVDWFRTGGQFTDEDAATELKGSA  
VSIARKLQRPKRLFDDDEDGDPHYDEVLMDSLEGEHRESMVRRTIFRLHETRDQKQHSYNSLVNFERRFFGDDEL  
NLKNLALNRKSVKLLQERRSAKVNAATPEGTPTPKAGKRPPVVPMAKKVSFTASNRNMMALYDNGGYEHTEF

**FBpp0304784**

MDNHMDKNDKEDKRSSPDSQRQVYIYMPPAVEHGHVVYLK DANLGATETEASAQLDPQEHLNADRLENNRRISE  
LDDEPSTSAQSAVKGQKSEDDQGHQTKTGISKMPGSPKQLHNVLEVICRFSREIPDAMEGREQLQPAVIVQIPKYRE

LGTQTAELPSQSQRRLDLTDLRDPNPPPCERTLHTFTISGNNLPGNPRQLRQTICARIGRSICDFVAAFCLCLQVNK  
DCVFCLGFFVAFVISASFLTAFFYRTLTFSSSPVRVVANPVSGTMRYELATLRFNGGYIYNSSQQKLL

**FBpp0306214**

MSGGDYDSGDYFMRSRKQRDKPSLWDSFQDPPSKTSGSDADWKKLQFCLKLFKICTYLLVFAVVLATSVFANLIYLY  
MAGNTGGTGPRVQVCSKYPVLRHGQVEAVASELDQIAWVWALIFAFAPPELLTFLRALRICMFKREQRPSGLEVGLV  
TLFELLHVVGALLTFTVLPALDVTRGAILGCCVCFVPALLNLLTGTRVWRWSADSLVLGSLALVAQGSVFLVWPSLSD  
SMEVQLLAIPLLLSIFRWVENFANTHEAIAYIIRTIRCTRSRYHTYLYLAPLKVLFVAGMGFILHGHEFVEYFGRFRDAW  
RPHLITLVQSNQDPDALLLAQANVSITAPPRRTLFTMQSSPNSVFYALAAQVGAAYLCHIFGKFACKIKIQKFSYALPLS  
LAGPATVCLVTFLAQLRASDPCSLHGFMPDYLSLLALGGSVEELGQRCLDYALWLWPLWWLAQVWTCLHIWQPHN  
DRNAPTEKLFVCPWYCGLLVDQCSMMNRRIVDWSEEYLAIKSDLTAPRDPVVALAADINASRDIQEEDKVPQLIVCA  
TMWHETEDEMMEFLKSIVRLDEDQCARRMARTHLNGGKADDEYYELETNIFDDAFVSDPRQCQNKRNPPINEY  
VKTLTRTIDKAAFEVYGVNIRIKPPLKIETPYGGRLVWTLPGRTKMVAHLKNKDKIRHKKRWSQVMYMYLLGYRIM  
ETKELSPRRKAVIAENTFILALDGDIDFQPRAVRLLIDRMKAVDELGAACGRIHPVGRGPMVWYQRFEYAIQHWLQK  
ATEHVIGCVLCSPGCSLFRASALMENSVMKRYTMISSEAMKMOVYDQGEDRWLCTLLLKAGSRVEYCAASDAYTH  
APESFNEFYNQRRRWVPSTIANIFDILADADTVVKKNNNSISTMYVWYQGMMLMIGTVLPGTIFLMMV GALVAVFSI  
DIWTAFLWNFFPILLFILACVYLKQKQFQLLIAFVISSVYCLVMMAVLIGIIVQMLEDGPLAPASLFFLLVAVQITIAGFMH  
PQEFWALLCGVIYYITIPSMYMLLMIFSVMNDVSWGTREAPVLKDDGKDAVDEANNYLPGWLNDPLLIDSELGE  
VSLMEQRFWKDLIKQYLPLELSREQQAMADGLKELRNMIAFVMMVNAIFVLIVFLLQLKKEFLHLEWPIDPTDFV  
SFDRDNLVMGIYRQYKELDPIGLCFVIFGLILIIQFLAMFFHRFATLCQLLATTQVDWFRTGGQFTDEDAATELKGSA  
VSIARKLQRPKRLFDDDEDGDPHYDEVLMDSLEGEHRESMVRRTIFRLHETRDQKQSDYSNLVFNFFERRFFGDDEL  
NLKNLALNRKSVKLLQERRSAAKVNAATPEGTPTPKAGKRPPVPMKAKVSFTASNRNMMALYDNGGYEHTEF