

Additional file 2

Deduced protein sequences of *Daphnia pulex* Spo-CYP307A1, Phm-CYP306A1, Dib-CYP302A1, Sad-CYP315A1 and Shd-CYP314A1. Information about the genomic sequences and protein ID obtained at The DOE Joint Genome Institute [<http://www.jgi.doe.gov/>]. Introns are indicated by (0), phase 0 intron; (1), phase 1 intron; (2), phase 2 intron.

***Daphnia* Spook (Spo: CYP307A1):**

(Dappul/scaffold_4:1888919-1892238; Protein ID 41863)

MADSLFFRIKSKAQRLVRSHLAKSSAAKASAAAATAVPVVTAAATSAGTSAGVVAKPWSPPPGVGPVIGSLHLLGQY
EVPFEAFSELSKIYGDIFISITLGSTPCVVVNSFKLIKEVLITKGPFGGRPNFIRYDILFGGDRDN (1) SLALCDWSYLQ
RDRRSIARHWCPRVDSMQFDTLSRVLTSESDLMVNELSLMTAAAAAGKGIDLKTMTMTMCANVFTHYMCSTRFDYNNKE
FGKVVRFLFDQIFWDINQGYAVDFLPWLMPVYRRHMQQKLSWGTDIRQFIVKTIIDEHRSTMDVNNPRDFTDVLSSQLGNE
KNNGENVQAADHNDNEKQLDWNHVLVELEDFLGGHSAIGNLLMRAVGELCSSPHVMANIQEEIRKVTCDNSRPVVLEDRP
SMPYTEATILETLRLSSSPIVPHVAMQNTSVA (1) GYDVQEGTMVFLNNYELNISPDYWGDDQALTFDPAKFIIQGKIVKP
EYFIFPFSTGKRACMGYRLVQHVSFVTLATLLQNFVDVSASEDVIHLPKACVAVPPDAFRVVLTPRPSAPASY

***Daphnia* Phantom (Phm: CYP306A1):**

(Dappul/scaffold_10:1477916-1482392; Protein ID 46010)

MEEGVLEEEEARSVGVWAWLSLSSLLGLLALLWLRFSQQQRNRQLLLLLPPGPSGLPWLGYPWIDSRAPYETFAELSR
RYGRIYSLKLGDM LAVFISDPQLVRQAFSRPVFSGRAPLYLTHGIMKGH (1) GLICAEGESWREHRRFVMNVMKQLGMAG
RRGASVMESRVMAGVLEFVH (0) CQVTDGGVGGGVLDLPGLRHICIGNIINGVVFGRTYAADDPTWIWLQHLDDQGVKQVA
VAGPINFLPVLR (2) FLPSYRKIMSFILDGQAETHRHYQEIIDQRQLNLSANQG (1) PDYTSVVEAYLLEMQRQSAGIP
PETFTTVQLHHVLADMFGAGTDTALTIIKWIVLYLILYPDVQ (0) ERIHEEIERVVGQLDQGRIPCYATDARRMPWTEAT
ICEVQRLKTIILPLGVPHGTQLQ (0) DCELAGYRIPKGAMVVPVWAMNLDPTLWPEPLQFRPERFL (0) EEEEEKWRVEKP
EHFLPFQCGRMCIGDDLGRITLIFLFTVTLLQHFRLSFPPQFTDYSATNFPQPDYGTFLVPHYPVALHPR

***Daphnia* Disembodied (Dib: CYP302A1):**

(Dappul/scaffold_811:2049-4377; Protein ID 204789)

MFSKQIPWTLCLPSRLCGGQKCVDKQVYYFNQTTCTIHNCPHQFPTSESTKEMKPFSGSIPGPKPLPVVGNIWRYAI (1) GQ
YSFDQLHVTGLKKYLQFGPIVREEILPGVNLLLLYRPEDIERYMYQVEGRYPSRRSHTALEFYRLQRPHIYNSGGLLPT (2
) NGPEWFRRLRQALQRPINMMENIRQYIPGIDNISSEFAEQIAISIKKNKTSPDFLEDLSKVFL (1) FIGLVTFTDTRLGS
LRTDLPDGDSCPNKLIQAASDTNSEILRTDNLQFWRKWNTPAYKRITRSQEYFER (2) VASEFVNAKNAELRSRNGQDQS
QKTLLLEVYLTSKDLDDVKDVMTMVSMDMLLAGIDT (0) SSYTMSEFIFYHLARNPLKQEKVYQEVNRFVNPSTSPVTQGILAE
LKYLKAAVKESFRNPISIGVGRILPEDSSFSGYHCPKN (0) TILVSQNVQVSKCLDRYFKNPLLFVPERWMKGDAAYEKT
HPYLVLPFGHGPRACIARRLAEQNLYILLSR (0) LVKRFSIEWNGAELDVRSQLINRPDAPLKFNFEVERRNC

***Daphnia* Shadow (Sad: CYP315A1):**

(Dappul/scaffold_93:309807-311873; Protein ID 60760)

MASYLRHPIRRISLLERRCYTAKSQPFDSIPAPKGLPL (0) VGTLWDVIRAGGVSQIHRYIDDRHRQLGPFIKREKLGHVE
AVWLADPALYEQVFQKEGTCPRPMLPEPWLIILNKKHAYKRGLFFM (2) QGEWLRYRKILSPLLLKTATLHRHIESFYDV
ADRLDDKWEHTENGLITHLEGLDYCYFVQ (0) VHILVLVNWLNLQEFYMNRFRIIKTKITCWAISIGSARLTLLPPALAAK
LNLDAWRCFEQSALSALQLANQLTQTCLEKLPPQDDNNEDDCIVSSLRQQKMKVSDIQRIVADLFLAAADT (0) TSHTTQ
WVLYLLARHPEVQNKIFYEIELVQSSKQRIQDEWQHPTIKGSVKEALRLYPVATFLTRIMQEQCTIGGYNIPPD (0) TL
MLMSAYTSGRDERYFWNAQDFIPERWNRHGSPNGGMVMDPFASLPFGHGRRGCIGRRLAESQMYILLYK (0) AIPRFTFQ
AENHVKMIMRLLGTVDQPVQLRLRTRS

***Daphnia* Shade (Shd: CYP314A1):**

(Dappul/scaffold_43:996318-999232; Protein ID 198743)

MGVLKKLQRFIILIVLHTQRVVSKYFILWSFKIFLPEAEDNKFFLND (1) GDVLPAPKPFSSQIPGPLHVPLFGSQWLYSWI
GPYFLDKLHLANE (1) DKYRKYGPVVEHFLWNFPPIIHLYDKHDIESVLKYPSPKYPIRPGLEAQIFYRKSRLPDYK (1) S
AGMVNV (2) QGFQWHLRSKLTTLQLASTALGDHTIAQLCIISDELIEKIQEERVENIVDGFQEKVIYRCGL (1) VIFAIL
FGRRLGALNKNISIPPIAERLMFATENLFVSHETMYGLPWKLFPTKSYKKLAECEDTIYD (2) VFTDLVNEALSNDENT
EIQSPVLNQLTAEGVDIRDKIVALIDLVAAGIET (0) TGNATFLLLHNIVSNPEVKARVYEELDRVLYSSHVTITPQLL
LELKYLKACVTESLR (2) LTPVAPNVARILEKSFTFQGYNVPVG (0) AMVICETWVSSLQDENYPDAKRFIPERWLDADK
VNHHFPFLAVPFGVGRMCPGKRIAEHEMLIITAK (0) LLQTFDMSFQKPLEQVYKFLISPKGPIRATLQDRH