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Dm Cyp6t3 1 -----MVSILWLLMIGLSIYLWLRQRYSYFERHNIVHLVPSAWTPLGHLRKLLELRISFGDLFHNTYADPRGGQ
Dpse Cyp6t3 1 -----MLLIWLLLTIVTLNFWLRHKYDFRSGRIGPHLPSSWSMGNLQGLLFLRISFGDLFRQLYADPRNGQ
Ag AGAP010961-PA 1 ---IMSLVVDLTYTVALLELLIKRKLCTDAQRFINRQMCDDPFHDAIGYFNLIMIREPLWQKLR
Am cytochrome P450 6AQ1 1 MIYVNSDALTYLTLVLVLCAGFAVWFLSTSGTRYWQFFRVPIYIEGR--PLVGNFLDAPFRKSTFELMDALYQNPKVEG
Aa XP_001650094 1 --MNLTPYWSLDILIVSSSLMIAVLYASWKLKYSRRGIMQITPS--PLFGNFKKCIIFOKSVSEIIRELY--GQNEG
Tc XP_970485 1 ---MLLTPYLPDITVVLVSVLALLLKYYSRNFPHWEKKNVYFKPI--PFFGNFVDISLFFTTIGEHAKLY--NQTT-
Bm cytochrome P450 9a20 1 -----MLLIWAVVLIATAFVLFYKQAYSLFSKHGVKGFPTL--PFFGNMGRIVLKMDFSDHISQSLY--DSFPE
Dm Phantom 1 MSADIVDIGHTGWMPVSQSLISILLVPGALVVLVLCERQCNDLMGAPPGGPWGLPFLGYLPFLDARAPHKSLQKLAARY

Dm Cyp6t3 70 AKVVGFFLEFQTPALMVRDPELIRLVLEKHFNSFLNRYEAAADAGDPMGSLTLP LAKYHNWRESR-----
Dpse Cyp6t3 70 AKIVGFFIFQTPALMVRDPELIRQLVLEKFNFNINRNFESADAG-DPMGALTLPLAKYHWHRESR-----
Ag AGAP010961-PA 72 SDFFGVNIIFTRPALVLRSPLEIKRRLCTDAQRFINRQMCDDPFHDAIGYFNLIMIREPLWQKLR-----
Am cytochrome P450 6AQ1 79 TKLFGVSIIMQPALVIRDPLELVKQVLEKDATYFSNRYMCTDRIHDAIGYFNLIMIKNPWQKLR-----
Aa XP_001650094 75 LPFMCFYIFYKPFPLVLRDLELVKHIILVKDFNTPANKHTSADSKNDRIGYSNLFPIKKNPANKYLR-----
Tc XP_970485 73 EFFFGIFVFDKPEHLIKSPELVKTLVLRDFNNEDDRCIAS-PHHDPLVKNMLFLNKNPEWKNVR-----
Bm cytochrome P450 9a20 66 ERFVGRYEFELNPMVIRIRDELKIKITVKDFEHLIDHRTIINKDTPFFGFRSLFPLRDQDWKDMR-----
Dm Phantom 81 GGIFELKMGVRPTVVLSDAALVVRDFRR--DVTMGRAPLYLTHGMCGFGFICAQEDIVRHRARETIDWLKALGMTRRP

Dm Cyp6t3 134 -----QSMALQFTSGRMRESMYPLMMG-----VIDLEQYLQRKLGDRSE--RMLPLSKMCQLYTT
Dpse Cyp6t3 133 -----QCMSQLFTSGRMRDVMYSQMLD-----VASDLEQYLNKRLGDRLE--RVLPLGRMCQLYTT
Ag AGAP010961-PA 136 -----GFLSPSVTSAKLRMQPLIEQKLIALVTTFOVGDMMASLDALPVLRPN-VRETEFKELCARFTT
Am cytochrome P450 6AQ1 143 -----AYLTPSLSLNKKRMYSLVLDQ-----IGNNMLAHLIDGVQKPTK-LRETEFKELCARFTT
Aa XP_001650094 139 -----GKLTSVFTSGKLEKMKFLMLD-----IGKNLEKHELLELLNDGNG--KEVELKDLICANFTT
Tc XP_970485 136 -----VKMTPVFTTGKLGMIPLIND-----VGETMTKYIAQKIPN--FSLAKETICAKFST
Bm cytochrome P450 9a20 130 -----STLSPAFTSSKMKMLMPPIVE-----VGEQMNKALQKRIQIAGVGVVDIDSKDLTTRYAN
Dm Phantom 158 GELRARLERRIARGVDECVRLFDTEAKKSCASEVNPALHSLGNINDLVFGITYKRDDPDWLYLQRLQEEGKVLIGV

Dm Cyp6t3 188 DVTGNLFYSMDVGGIARRGKSQLKKTKELEFDPPRKKVLDPMSIFFLEQWNTNLRKAKVFSSEYAOFMRLGLVGHPRER----
Dpse Cyp6t3 187 DVTGNLFYSLNVGGLRRGRSELITKTKELFNTNPKVLDPMSVFFLEPKWTGVLKPKVFTEDYARYMHLVDDHHEP----
Ag AGAP010961-PA 200 DVTIASFFGMQANCLKDESEFRYYGRKIFDYGGRGLTMASSFFLEPELVVYLRKLFPRDTEAFKAIIEQELARRET
Am cytochrome P450 6AQ1 197 DVIASFFGIQANCLSDSESEFRYYGRKIFEYGPKRALNMAAFFFMPELVVYLRGKLFPRDTERFLKTIIEQELARRETS
Aa XP_001650094 192 DDLIGTAFAGVNLNSLKDPSDFRENGLRVFDYLNKRAFEFSSIFFLEPNLNKYFVSKFFGK-ATDYFRNSFWVINQRIES
Tc XP_970485 186 DVIAKCAFGINANSFKNEDAERFKIGRRIIDFRWSTAIQTSYFFLEGLVNLKFRMLDKDASDFLRFTFWHTTKLREEK
Bm cytochrome P450 9a20 185 DVIASCAFGLKVDSSITEENNQFYAMKAASTFNFRQLLIFFGLASVLEKLVKILRITLFOKEIKTFFRELILGTMKNREAO
Dm Phantom 238 SGVVNFLPWLRLHPANVRNIRELLECKAKTHAIYDRIVEACGQRLKEKQKVFKELOEQKRLQRLQLEKEQLRQSKADPSS

Dm Cyp6t3 264 --SKGDLIDQLLHQSSR-----PSSHYAQHP-----DFIASQASILLAGFETSSALLGFTLYE
Dpse Cyp6t3 263 --TKGDLINQLQHFQLSR-----SSNHYSQHP-----DFVASQAGIILLAGFETSSALHMGFTLYE
Ag AGAP010961-PA 280 GESRGDFIDSMIAKNNN-----ATLGVNEKILWISSAALKGDILVAQAATFYMASFETSSVLSFTLYE
Am cytochrome P450 6AQ1 277 GENRGDFIDSMIAKNNN-----ATIGVEEKIP-----LKGDLVAQAATFYMASFETSSVLSFTLYE
Aa XP_001650094 271 NVKRNLDIDCLIELEK-----HKNDESEFEGFR-----FDGDDLVSAQAATFFTGGFETSSVLSFTLYE
Tc XP_970485 266 NLKANDLIDAIKALKD-----NQEFCKNMN-----FEGDKVVAQAQAQFFVAGFETSSVMAFTLYE
Bm cytochrome P450 9a20 265 NIIRPDMHLLMEAKKGLRHDEKSTKDSADGATVEESVGGKDDINRVWTDLVAQAALVFFVAGFETVSSAMTFLLEHE
Dm Phantom 318 EQSEADEDEDESEDEEDTYEP-----ECILEHFLAVRDTDSQLYCDQLRHLHADLDFGAGVDTSLATLRWFLLY

Dm Cyp6t3 317 LAKAPDLQKRLREELAEAFSLAPT-LTYETLV-TLPPFLRKVCLEALRLYPAAAF-INRECTSS-DPNGFSLOPHVDFFVVP
Dpse Cyp6t3 316 LAKAPDIQERLRSELREAFISTAT-LSYDTLM-TLPPFLKMKVCLEALRLYPAAAF-VNRECTSS-ASRGFSLOPHVDFFVVP
Ag AGAP010961-PA 346 LTKNPEVQERLRBEIRDIIVKYGREIPYBAYANEMPYLGMISETNRLYPVLAFL-IEROCTSLPEAGTGYKLPDPLHDYVTP
Am cytochrome P450 6AQ1 336 LTKNPEIQORLREIHNCKIKYGRDLSYECQLVNEMPYLGMISEARLYPVLPFL-IEROCTSLPAGATGVYKLPDPLHNFVVP
Aa XP_001650094 330 LALNKDIDQKTVRTEIHEALAQTDGKITVYDMIT-NLPYLDVWVSETLRKYPPLEFL-LDRVALHDYKIPNS-----DVTID
Tc XP_970485 322 LCLQPOQORRVRAEIIATCKEHNG-LTYEALQ-SMKYLNMCVCETLRKYPPVLPFL-LDRCTCKEDYKLPNS-----NVVTE
Bm cytochrome P450 9a20 345 LALNPEVQEKLVREIRENEKNNNGKFDYNSIQ-NMVYLDVWVSEVLRMPPVLA-LDRMCKVDYLNKGPNDKSKEDFIIR
Dm Phantom 386 LAR-----EQRCQRLHELELLPLGSPSTLEELE-PLAYLRACISETMRRRSVPLGIPHGCKENFVVGDY-----FLK

Dm Cyp6t3 393 NGMPAYHSILGLHRDEKYPPEPNRFDPERFDPDRSKDITIPMTYIPFGAGPHGCTGSRGSLQKLGLAHILRLCRVEVCE
Dpse Cyp6t3 392 PCMPAYHSILGLHRDERFPPPEPCVDFDPERFDPDRSRHIHPMTYIPFGAGPHGCTGSRGSLQKLGIVHILKQYVWVETCE
Ag AGAP010961-PA 425 NGMPLMIPPIYATHRDPKYFPNPTVDFDPERFAKBNLDQIQCTYMPFGVGPRTCLGSHFGTLQIKIALLKLSQYRIERSP
Am cytochrome P450 6AQ1 415 NKMPVLVPIYATHRDPKYFPDPLRFDPPDRFSKNADNINVCPSYMPFGVGPRTCLGSHFGTLQVQVAITRLLSKYRILRSF
Aa XP_001650094 402 KDTPTVITPMIAFHVDPKYFPNPEKVDPLRFSEVWKTRPSYVYMPFGECPHICIGMRLGLLQSKLGIETLKDYEVSQCE
Tc XP_970485 393 KGTPTVITPMFGLHYDPPQYFPNPKYDPERFSDENMQNITPFSYIIPFGECPRNCTIGERFGLGTGLGILHILSEFEVSKS
Bm cytochrome P450 9a20 423 KDVAVGIPVWGLHRDPEFPNPLKFDPERFSEBNKHNKIPFSYMPFGLGPRNCTIGSRFALCEVVMYTYQLLQHMESISQCE
Dm Phantom 453 GGSMTVCSEWATHMDPVAPEPEEFRPERFLTADGAYQAPQPIPFSSGYRMCPEEMARMILTLPTRILRRFHLELPS

Dm Cyp6t3 473 -----QTVPQIRFNPKTFMLESKDEIYLRFRYRDKL----
Dpse Cyp6t3 472 -----RTVSEIRFNPKSFMLESSENEIYLRFCRSSL----
Ag AGAP010961-PA 505 -----STPEVLTYRKNATLNSNEGLYAALVEDAM----
Am cytochrome P450 6AQ1 495 -----SSPETLYRKNATLHNSNEGLYADLELDEL----
Aa XP_001650094 482 -----KTKIPMVLDPKGLTTTALGGLYLNIRKITIAAG-
Tc XP_970485 473 -----DTPVPLEFEPKSEVLAASKVGLPMKFKKVMTSA-
Bm cytochrome P450 9a20 503 -----KTCIPSKLSKETFNLRLEGCHWIRLIRN-
Dm Phantom 533 GTEVDMAGESGITLTPTPHMLRFTKLPFAVEMRHAPDGAVVQD

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