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| --- | --- | --- | --- | --- |
| ***Table 10. FASTA Files used for Phylogenetic Analysis*** | | | | |
| Sequence Source | Protein Name | Species | Amino Acid Sequence | Percentage Identity |
| BLASTp | brahma-associated protein of 60 kDa | *Drosophila erecta* | >XP\_001978304.1 brahma-associated protein of 60 kDa [Drosophila erecta]  MSQRFAPGQAPVQSRYQPPPPAPGMRPYPPPGASFPPRGFPLHPNTTQPVPGTANV  AGVPGVPGVPGVPGPSLLQRAAQQPGFQSSLRGTGAGGGGVGSGGGSKRSNESRSL  GGGGGKSDFVTAKKKKKLADKILPQKVRDLVPESQAYMDLLTFERKLDATIMRKRLDIQ  EALKRPMKQKRKLRIFISNTFYPSKEPTNDGEEGAVASWELRVEGRLLEDGKGDPNTKIK  RKFSSFFKSLVIELDKELYGPDNHLVEWHRTHTTQETDGFQVKRPGDRNVRCTILLLLDY  QPLQFKLDPRLARLLGVHTQTRPVIISALWQYIKTHKLQDAHEREYINCDKYLEQIFSCQR  MKFAEIPQRLNPLLHPPDPIVINHFIESGAENKQTACYDIDVEVDDTLKNQMNSFLMST  ASQQEIQGLDTKIHETVDTINQMKTNREFFLSFAKDPQMFIHRWIISQTRDLKLMTDVV  GNPEEERRSEFYYQPWTHEAVSRYFFTKVNQKRAELEQALGIRNG | 98.83% |
| brahma-associated protein of 60 kDa | *Drosophila yakuba* | >XP\_002100431.1 Bap60 [Drosophila yakuba]  MSQRFAPGQAPVQSRYQPPPPAPGMRPYPPPGASFPPRGFPLHPNTTQPVPGTANV  AGVPGVPGVPGVPGPSLLQRAAQQSGFQSSLRGTGAGGGGVGSGGGSKRSNESRSL  GGGGGKSDFVTAKKKKKLADKILPQKVRDLVPESQAYMDLLTFERKLDATIMRKRLDIQ  EALKRPMKQKRKLRIFISNTFYPSKEPTNDGEEGAVASWELRVEGRLLEDGKGDPNTKIKR  KFSSFFKSLVIELDKELYGPDNHLVEWHRTHTTQETDGFQVKRPGDRNVRCTILLLLDYQP  LQFKLDPRLARLLGVHTQTRPVIISALWQYIKTHKLQDAHEREYINCDKYLEQIFSCQRMK  FAEIPQRLNPLLHPPDPIVINHFIESGAENKQTACYDIDVEVDDTLKNQMNSFLMSTASQQ  EIQGLDTKIHETVDTINQMKTNREFFLSFAKDPQMFIHRWIISQTRDLKLMTDVVGNPEEER  RSEFYYQPWTHEAVSRYFFTKVNQKRAELEQALGIRNG | 98.64 |
| brahma-associated protein of 60 kDa | *Drosophila hydei* | >XP\_023175982.1 brahma-associated protein of 60 kDa [Drosophila hydei]  MSQRFAPGQAPVQSRYQPPPQAPGMRPYPPGTGSTFPPRGFPLHPNTTQPVPGSVAAP  VGPGPALLQRTTQPTFQSGLRGSGSGGGGGGGSKRSAESRSLNSGPNKGEFVAGAKKKK  KLADKILPQKVRDLVPESQAYMDLLTFERKLDATIMRKRLDIQEALKRPMKQKRKLRIFISNT  FYPSKEPSNDGDEGAVASWELRVEGRLLEDGKGDPNTKIKRKFSSFFKSLVIELDKELYGPD  NHLVEWHRTHTTQETDGFQVKRPGDRNVRCTILLLLDYQPLQFKLDPRLARLLGVHTQTR  PVIISALWQYIKTHKLQDAHEREYINCDKYLEQIFSCQRMKFAEIPQRLNPLLHPPDPIVINHF  IESGAENKQTACYDIDVEVDDTLKNQMNNFLMSTASQQEIQGLDTKIHETVDTINQMKTNR  EFFLSFAKDPQMFIHRWIISQTRDLKLMTDVVGNPEEERRAEFYYQPWTHEAVSRYFFTKVNQ  KRAELEQALGIRNG | 90.72 |
| brahma-associated protein of 60 kDa | *Drosophila mojavensis* | >XP\_002011134.1 brahma-associated protein of 60 kDa [Drosophila mojavensis]  MSQRFAPGQAPVQSRYQPPPQAPGMRPYPPGTGSTFAPRGFPLHPNTTQPVPGSVAAPVGPGPALLQRTT  QPTFQSGLRGSGSGGGGGGGSKRSAESRSLNSGPNKGEFVAGAKKKKKLADKILPQKVRDLVPESQAYMD  LLTFERKLDATIMRKRLDIQEALKRPMKQKRKLRIFISNTFYPSKEPSNDGDEGAVASWELRVEGRLLED  GKGDPNTKIKRKFSSFFKSLVIELDKELYGPDNHLVEWHRTHTTQETDGFQVKRPGDRNVRCTILLLLDY  QPLQFKLDPRLARLLGVHTQTRPVIISALWQYIKTHKLQDAHEREYINCDKYLEQIFSCQRMKFAEIPQR  LNPLLHPPDPIVINHFIESGAENKQTACYDIDVEVDDTLKNQMNNFLMSTASQQEIQGLDTKIHETVDTI  NQMKTNREFFLSFAKDPQMFIHRWIISQTRDLKLMTDVVGNPEEERRAEFYYQPWTHEAVSRYFFTKVNQ  KRAELEQALGIRNG | 90.52 |
| brahma-associated protein of 60 kDa | *Drosophila busckii* | >XP\_017850986.1 brahma-associated protein of 60 kDa [Drosophila busckii]  MSQRFAPGQAPVQSRYQPPPQAPGMRPYPPGTGTSFPPRGFPLHNTAQPVPGGSVAPVGVGPGPSLLQRA  SQPSFPSGLRGNAGGVGGGGGGGSKRSNESRSMNANKAEFAGGAKKKKKLADKILPQKVRDLVPESQAYM  DLLTFERKLDATIMRKRLDIQEALKRPMKQKRKLRIFISNTFYPSKEPSNDGDEGAVASWELRVEGRLLE  DGKGDPNTKIKRKFSSFFKSLVIELDKELYGPDNHLVEWHRTHTTQETDGFQVKRPGDRNVRCTILLLLD  YQPLQFKLDPRLARLLGVHTQTRPVIISALWQYIKTHKLQDAHEREYINCDKYLEQIFGCQRMKFAEIPQ  RLNPLLHPPDPIVINHFIESGAENKQTACYDIDVEVDDTLKNQMNNFLMSTASQQEIQGLDTKIHETVDT  INQMKTNREFFLSFAKDPQMFIHRWIISQTRDLKLMTDVVGNPEEERRAEFYYQPWTHEAVSRYFFTKVN  QKRAELEQALGIRSG | 90.73 |
| brahma-associated protein of 60 kDa | *Drosophila obscura* | >XP\_022214978.1 brahma-associated protein of 60 kDa [Drosophila obscura]  MSQRFAPGQAPVQSRYQPPPPSPGMRPYPPPGATFPPRGFPLHPNTTQPVPGTAAPPGVPGPGPGPSLLQ  RASQPAFQSVLRGTGGGGGGSGGGSKRSAESRSLNSGAGKGEFGAKKKKKLADKILPQKVRDLVPESQAY  MDLLTFERKLDATIMRKRLDIQEALKRPMKQKRKLRIFISNTFYPSKEPSNEGEEGAVASWELRVEGRLL  EDGKGDPNTKIKRKFSSFFKSLVIELDKELYGPDNHLVEWHRTHTTQETDGFQVKRPGDRNVRCTILLLL  DYQPLQFKLDPRLARLLGVHTQTRPVIISALWQYIKTHKLQDAHEREYINCDKYLEQIFSCQRMKFAEIP  QRLNPLLHPPDPIVINHFIESCAENKQTACYDIDVEVDDTLKNQMNNFLMSTASQQEIQGLDTKIHETVD  TINQMKTNREFFLSFAKDPQMFIHRWIISQTRDLKLMTDIVGNPEEERRAEFYYQPWTHEAVSRYFFTKV  NQKRAELEQALGIRNG | 93.23 |
| brahma-associated protein of 60 kDa | *Drosophila virilis* | >XP\_002056845.1 brahma-associated protein of 60 kDa [Drosophila virilis]  MSQRFAPGQAPVQSRYQPPPQSPGMRPYPPVTGTTFPPRGFPLHPNTTQPVPGSVTAPVGPGPALLQRTT  QPSFQSGLRGSGSGGAGGGGGSKRSAESRSLNSGPNKGEFATGAKKKKKLADKILPQKVRDLVPESQAYM  DLLTFERKLDATIMRKRLDIQEALKRPMKQKRKLRIFISNTFYPSKEPSNDGDEGAVASWELRVEGRLLE  DGKGDPNTKIKRKFSSFFKSLVIELDKELYGPDNHLVEWHRTHTTQETDGFQVKRPGDRNVRCTILLLLD  YQPLQFKLDPRLARLLGVHTQTRPVIISALWQYIKTHKLQDAHEREYINCDKYLEQIFSCQRMKFAEIPQ  RLNPLLHPPDPIVINHFIESGAENKQTACYDIDVEVDDTLKTQMNSFLMSTASQQEIQGLDTKIHETVDT  INQMKTNREFFLSFAKDPQMFIHRWIISQTRDLKLMTDVVGNPEEERRAEFYYQPWTHEAVSRYFFTKVN  QKRAELEQALGIRNG | 90.52 |
| brahma-associated protein of 60 kDa | *Drosophila navojoa* | >XP\_017965180.1 brahma-associated protein of 60 kDa [Drosophila navojoa]  MSQRFAPGQAPVQSRYQPPPQAPGMRPYPPGTGSTFAPRGFPLHPNTTQPVPGSVAAPVGPGPALLQRTT  QPTFQSGLRGSGSGGGGGGGSKRSAESRNLNSGPNKGEFVAGAKKKKKLADKILPQKVRDLVPESQAYMD  LLTFERKLDATIMRKRLDIQEALKRPMKQKRKLRIFISNTFYPSKEPSNDGDEGAVASWELRVEGRLLED  GKGDPNTKIKRKFSSFFKSLVIELDKELYGPDNHLVEWHRTHTTQETDGFQVKRPGDRNVRCTILLLLDY  QPLQFKLDPRLARLLGVHTQTRPVIISALWQYIKTHKLQDAHEREYINCDKYLEQIFSCQRMKFAEIPQR  LNPLLHPPDPIVINHFIESGAENKQTACYDIDVEVDDTLKNQMNNFLMSTASQQEIQGLDTKIHETVDTI  NQMKTNREFFLSFAKDPQMFIHRWIISQTRDLKLMTDVVGNPEEERRAEFYYQPWTHEAVSRYFFTKVNQ  KRAELEQALGIRNG | 90.33 |
| brahma-associated protein of 60 kDa | *Scaptodrosophila lebanonensis* | >XP\_030378640.1 brahma-associated protein of 60 kDa [Scaptodrosophila lebanonensis]  MSQRFAPGQAPVQSRYQPPPQAPGMRPYAAGASFPPRGFPLHPNTTQPVPGSAAAPVGPSLLQRASQPSF  QSGLRGSGSGGGSKRSAESRNLSSAQNKGEFVTAKKKKKLADKILPQKVRDLVPESQAYMDLLTFERKLD  ATIMRKRLDIQEALKRPMKQKRKLRIFISNTFYPSKEPNNDGDDGAVASWELRVEGRLLEDGKGDPNTKI  KRKFSSFFKSLVIELDKELYGPDNHLVEWHRTHTTQETDGFQVKRPGDRNVRCTILLLLDYQPLQFKLDP  RLARLLGVHTQTRPVIISALWQYIKTHKLQDAHEREYINCDKYLEQIFSCQRMKFAEIPQRLNPLLHPPD  PIVINHFIESGAENKQTACYDIDVEVDDTLKNQMNNFLMSTASQQEIQGLDTKIHETVDTINQMKTNREF  FLSFAKDPQMFIHRWIISQTRDLKLMTDVVGNPEEERRAEFYYQPWTHEAVSRYFFTKVNQKRAELEQAL  GIRSG | 89.90 |
| brahma-associated protein of 60 kDa | *Drosophila willistoni* | >XP\_002067443.1 brahma-associated protein of 60 kDa [Drosophila willistoni]  MSQRFAPGQAPVQSRYQPPQPAPGMRSYPPPGGTFAPRGFPLHPNTTQPVPGTAGAGTPVGVPVGPGGPG  VPGPSLLQRASQQPTFASGLRGNAGGGGGSGSGGGGGGGSGGGSKRSAESRNLNSGPGGKGGEFVSAAKK  KKKLADKILPQKVRDLVPESQAYMDLLTFERKLDATIMRKRLDIQEALKRPMKQKRKLRIFISNTFYPSK  EPTNDGDEGAVASWELRVEGRLLEDGKGDPNTKIKRKFSSFFKSLVIELDKELYGPDNHLVEWHRTHTTQ  ETDGFQVKRPGDRNVRCTILLLLDYQPLQFKLDPRLARLLGVHTQTRPVIISALWQYIKTHKLQDAHERE  YINCDKYLEQIFSCQRMKFAEIPQRLNPLLHPPDPIVINHFIESGAENKQTACYDIDVEVDDTLKNQMNN  FLMSTASQQEIQGLDTKIHETVDTINQMKTNREFFLSFAKDPQMFIHRWIISQTRDLKLMTDVVGNPEEE  RRAEFYYQPWTHEAVSRYFFTKVNQKRAELEQALGIRNG | 89.41 |
| PSI-BLAST | SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 isoform X1 | *Piliocolobus tephrosceles* | >XP\_023066935.1 SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 isoform X1 [Piliocolobus tephrosceles]  MPCAKMKLLLQAPLHQRARVGVETVAEAVVCPLFQVLVYLPSAWGRPLTGPLYPRVLLYGFPSKTVKAGG  RGQHAFSASRSSLGDSLATLSLPCRPAGRGNRRALGGRSGGGGSSGSGSLCSCIGGSGKMAARAGFQSVA  PSGGAGASGGAGAAAALGPGGTPGPPVRMGPAPGQGLYRSPMPGAAYPRPGMLPGSRMTPQGPSMGPPGY  GGNPSVRPGLAQSGMDQSRKRPAPQQIQQVQQQAVQNRNHNAKKKKMADKILPQRIRELVPESQAYMDLL  AFERKLDQTIMRKRLDIQEALKRPIKQKRKLRIFISNTFNPAKSDAEDGEGTVASWELRVEGRLLEDSAL  SKYDATKQKRKFSSFFKSLVIELDKDLYGPDNHLVEWHRTATTQETDGFQVKRPGDVNVRCTVLLMLDYQ  PPQFKLDPRLARLLGIHTQTRPVIIQALWQYIKTHKLQDPHEREFVICDKYLQQIFESQRMKFSEIPQRL  HALLMPPEPIIINHVISVDPNDQKKTACYDIDVEVDDTLKTQMNSFLLSTASQQEIATLDNKIHETIETI  NQLKTQREFMLSFARDPQGFINDWLQSQCRDLKTMTDVVGNPEEERRAEFYFQPWAQEAVCRYFYSKVQQ  RRQELEQALGIRNT | 62.14 |
| SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 isoform X1 | *Macaca nemestrina* | >XP\_011758432.1 SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 isoform X1 [Macaca nemestrina]  MPCAKMKLLLQGPHHQRAGVGVETGAEAVVRPPFQVLVYLPSAWGRPLTGPLYPRVLLYGFPSRTVKAGG  RGQHAFSATRSSLGDSLAALSLPCRPAGRGNRRALGGRSGGGGSSGSGSLCSCIGGSGKMAARAGFQSVA  PSGGAGASGGAGAAAALGPGGTPGPPVRMGPAPGQGLYRSPMPGAAYPRPGMLPGSRMTPQGPSMGPPGY  GGNPSVRPGLAQSGMDQSRKRPAPQQIQQVQQQAVQNRNHNAKKKKMADKILPQRIRELVPESQAYMDLL  AFERKLDQTIMRKRLDIQEALKRPIKQKRKLRIFISNTFNPAKSDAEDGEGTVASWELRVEGRLLEDSAL  SKYDATKQKRKFSSFFKSLVIELDKDLYGPDNHLVEWHRTATTQETDGFQVKRPGDVNVRCTVLLMLDYQ  PPQFKLDPRLARLLGIHTQTRPVIIQALWQYIKTHKLQDPHEREFVICDKYLQQIFESQRMKFSEIPQRL  HALLMPPEPIIINHVISVDPNDQKKTACYDIDVEVDDTLKTQMNSFLLSTASQQEIATLDNKIHETIETI  NQLKTQREFMLSFARDPQGFINDWLQSQCRDLKTMTDVVGNPEEERRAEFYFQPWAQEAVCRYFYSKVQQ  RRQELEQALGIRNT | 62.14 |
| SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1 L homeolog | *Xenopus laevis* | >NP\_001136258.1 SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1 L homeolog [Xenopus laevis]  MAARAGFQSLTPGGSGSTAAALGPGTPGPAVRMGPAPGQGIYRSPMPGAAYPRPGMLPGSRMTPQGPAMG  PPGYGGSPAARPGIAQSGMDQSRKRPAPQQIQQVQQAAQNRNHSAKKKKMADKILPQRIRELVPESQAYM  DLLAFERKLDQTIMRKRLDIQEALKRPIKQKRKLRIFISNTFNPAKSDAEDGEGTVASWELRVEGRLLED  AALSKYDATKQKRKFSSFFKSLVIELDKDLYGPDNHLVEWHRTPTTQETDGFQVKRPGDLNVRCTVLLML  DYQPPQFKLDPRLARLLGIHTQTRPVIIQALWQYIKTHKLQDPHEREFIICDKYLQQIFESQRMKFSEIP  QRLHALLMPPEPIIINHVISVDPNDQKKTACYDIDVEVDDTLKTQMNSFLLSTASQQEIAALDNKIHETI  ETINQLKIQREFMLSFARDPQGFINDWLQSQCRDLKAMTDVVGNPEEERRADFYFQPWAHEAVCRYFYSK  VQQRRQELEQALGIRNT | 61.38 |
| SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 isoform X1 | *Macaca mulatta* | >XP\_001111275.3 SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 isoform X1 [Macaca mulatta]  MPCAKMKLLLQAPHHQRAGVGVETGAEAVVRPPFQVLVYLPSAWGRPLTGPLYPRVLLYGFPSRTVKAGG  RGQHAFSATRSSLGDSLAALSLPCRPAGRGNRRALGGRSGGGGSSGSGSLCSCIGGSGKMAARAGFQSVA  PSGGAGASGGAGAAAALGPGGTPGPPVRMGPAPGQGLYRSPMPGAAYPRPGMLPGSRMTPQGPSMGPPGY  GGNPSVRPGLAQSGMDQSRKRPAPQQIQQVQQQAVQNRNHNAKKKKMADKILPQRIRELVPESQAYMDLL  AFERKLDQTIMRKRLDIQEALKRPIKQKRKLRIFISNTFNPAKSDAEDGEGTVASWELRVEGRLLEDSAL  SKYDATKQKRKFSSFFKSLVIELDKDLYGPDNHLVEWHRTATTQETDGFQVKRPGDVNVRCTVLLMLDYQ  PPQFKLDPRLARLLGIHTQTRPVIIQALWQYIKTHKLQDPHEREFVICDKYLQQIFESQRMKFSEIPQRL  HALLMPPEPIIINHVISVDPNDQKKTACYDIDVEVDDTLKTQMNSFLLSTASQQEIATLDNKIHETIETI  NQLKTQREFMLSFARDPQGFINDWLQSQCRDLKTMTDVVGNPEEERRAEFYFQPWAQEAVCRYFYSKVQQ  RRQELEQALGIRNT | 62.14 |
| SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1, isoform CRA\_e | *Homo sapiens* | >EAW58125.1 SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1, isoform CRA\_e [Homo sapiens]  MKLLLQAPLHQRARVGVETGAEAVVRPPFQVLVFLPSAWGRPLTRPLYCRALLYGFPSRTVKAGGRGQHA  FSASRPALSHSLAALSLPCRPAGRGNRRALGGRSGGGGSSGSGSLCGCIGGSGKMAARAGFQSVAPSGGA  GASGGAGAAAALGPGGTPGPPVRMGPAPGQGLYRSPMPGAAYPRPGMLPGSRMTPQGPSMGPPGYGGNPS  VRPGLAQSGMDQSRKRPAPQQIQQVQQQAVQNRNHNAKKKKMADKILPQRIRELVPESQAYMDLLAFERK  LDQTIMRKRLDIQEALKRPIKQKRKLRIFISNTFNPAKSDAEDGEGTVASWELRVEGRLLEDSALSKYDA  TKQKRKFSSFFKSLVIELDKDLYGPDNHLVEWHRTATTQETDGFQVKRPGDVNVRCTVLLMLDYQPPQFK  LDPRLARLLGIHTQTRPVIIQALWQYIKTHKLQDPHEREFVICDKYLQQIFESQRMKFSEIPQRLHALLM  PPEPIIINHVISVDPNDQKKTACYDIDVEVDDTLKTQMNSFLLSTASQQEIATLDNKIHETIETINQLKT  QREFMLSFARDPQGFINDWLQSQCRDLKTMTDVVGNPEEERRAEFYFQPWAQEAVCRYFYSKVQQRRQEL  EQALGIRNT | 62.14 |
| SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 | *Pongo abelii* | >XP\_002823254.1 SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 [Pongo abelii]  MPCAKMKLLLQAPLHQRSRVGVETGAEAVVRPPFQVLVFLPSAWGRPLTGPLYRRALLYGFPSRTVKAGG  RGQHAFSASRPALAHSLAALSLPCRPAGRGNRRALGGRSGGGGSSGSGSLCSCIGGSGKMAARAGFQSVA  PSGGAGASGGAGAAAALGPGGTPGPPVRMGPAPGQGLYRSPMPGAAYPRPGMLPGSRMTPQGPSMGPPGY  GGNPSVRPGLAQSGMDQSRKRPAPQQIQQVQQQAVQNRNHNAKKKKMADKILPQRIRELVPESQAYMDLL  AFERKLDQTIMRKRLDIQEALKRPIKQKRKLRIFISNTFNPAKSDAEDGEGTVASWELRVEGRLLEDSAL  SKYDATKQKRKFSSFFKSLVIELDKDLYGPDNHLVEWHRTATTQETDGFQVKRPGDVNVRCTVLLMLDYQ  PPQFKLDPRLARLLGIHTQTRPVIIQALWQYIKTHKLQDPHEREFVICDKYLQQIFESQRMKFSEIPQRL  HALLMPPEPIIINHVISVDPNDQKKTACYDIDVEVDDTLKTQMNSFLLSTASQQEIATLDNKIHETIETI  NQLKTQREFMLSFARDPQGFINDWLQSQCRDLKTMTDVVGNPEEERRAEFYFQPWAQEAVCRYFYSKVQQ  RRQELEQALGIRNT | 62.14 |
| SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1 | *Xenopus tropicalis* | >CAJ82676.1 SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1 [Xenopus tropicalis]  MAARAGFQSVTPGGSGSATAALGLGTPGPAVRMGPAPGQGMYRSPMPGAAYPRPGMLPGSRMTPQGPAMG  PPGYGGSPAARPGMAQSGMDQSRKRPAPQQIQQVQQQAAQNRNHSAKKKKMADKILPQRIRELVPESQAY  MDLLAFERKLDQTIMRKRLDIQEALKRPIKQKRKLRIFISNTFNPAKSDAEDGEGTVASWELRVEGRLLE  DAALSKYDATKQKRKFSSFFKSLVIELDKDLYGPDNHLVEWHRTPTTQETDGFQVKRPGDMNVRCTVLLM  LDYQPPQFKLDPRLARLLGIHTQTRPVIIQALWQYIKTHKLQDPHEREFIICDKYLQQIFESQRMKFSEI  PQRLHALLMPPEPIIINHVISVDPNDQKKTACYDIDVEVDDTLKTQMNSFLLSTASQQEIAALDNKIHET  IETINQLKIQREFMLSFARDPQGFINDWLQSQCRDLKTMTDVVGNPEEERRAEFYFQPWAQEAVCRYFYS  KVQQRRQELEQALGIRNT | 61.38 |
| SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 isoform X1 | *Apteryx rowi* | >XP\_025940749.1 SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 isoform X1 [Apteryx rowi]  MAARAGFQAVTPSGGGGGAAAGAAALGPGTPGGPVRMGPAPGQGLYRSPLPGAAYPRPGMLPGSRLTPQG  PSMGPPGYGGSPAVRPGMAQAGLDQARKRPAPQQLQQVQPQAVPNRNHNAKKKKMADKILPQRIRELVPE  SQAYMDLLAFERKLDQTIMRKRLDIQEALKRPIKQKRKLRIFISNTFNPAKSDAEDGEGTVASWELRVEG  RLLEDSALSKYDATKQKRKFSSFFKSLVIELDKDLYGPDNHLVEWHRTATTQETDGFQVKRPGDVNVRCT  VLLMLDYQPPQFKLDPRLARLLGIHTQTRPVIIQALWQYIKTHKLQDPHEREYVICDKYLQQIFESQRMK  FSEIPQRLHALLMPPEPIIINHVISVDPNDQKKTACYDIDVEVDDTLKTQMNSFLLSTASQQEIAALDNK  IHETIETINQLKTQREFMLSFARDPQGFINDWLQSQCRDLKTMTDVVGNPEEERRAEFYFQPWAQEAVCR  YFYSKVQQRRQELEQALGIRNT | 61.76 |
| SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 | *Liparis tanakae* | >TNN78655.1 SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 [Liparis tanakae]  MGRCGIVTTLPRKLCSRSRGNSVPPPAATFREEMAARGGFQSAPTAGGGVAMGPGPPVPIAGPGMGPGTP  SGRMIPSSAAQNHMYRSPMPGPGYPRPGMPPSNRMTPQGPAMGPPGYGNSPVSRPVMPGVMDPSRKRPAP  QQIQQVQQQNRNQHTKKKKMADKILPQRIRELVPESQAYMDLLAFERKLDQTIMRKRLDIQEALKRPIKQ  KRKLRIFISNTFNPAKPDAEDGEGTVASWELRVEGRLLEDTAVSKYEATKQKRKFSSFFKSLVIELDKDL  YGPDNHLVEWHRTGTTQETDGFQVKRPGDVGVRCTVLLMLDYQPPQFKLDPRLARMLGIHTQTRPVIIQA  LWQYVKTHKLQDPHEREFINCDKYLQQIFETQRMKFSEIPQRLHALLMPPEPIIINHVISVDPNDQKKTA  CYDIDVEVDDTLKTQMNSFLLSTASQQEIAGLDNKIHETIETINQLKTQREFMLNFARDPQGFINDWLQS  QCRDLKTMTDVVANPEEERRAEFYYQPWAQEAVCRYFYSKVQQRRQELETALGIRNT | 62.57 |
| SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 isoform X2 | *Microcaecilia unicolor* | >XP\_030054089.1 SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1 isoform X2 [Microcaecilia unicolor]  MAARAGFQSVTPGGGGGGGGAALGSSTTGPAVRMGPAPGQGLYRSPMPGAAYPRPGMLPGNRMTPQGPSM  GPPGYGGSPAARPGMAQSGLDQSRKRPAPQQIQQVQQQTAQNRNHSAKKKKMADKILPQRIRELVPESQA  YMDLLAFERKLDQTIMRKRLDIQEALKRPIKQKRKLRIFISNTFNPAKSDAEDGEGTVASWELRVEGRLL  EDTALTKYDATKQKRKFSSFFKSLVIELDKDLYGPDNHLVEWHRTATTQETDGFQVKRPGDVNVRCTVLL  MLDYQPPQFKLDPRLARLLGIHTQTRPVIIQALWQYIKTHKLQDPHEREFVICDKYLQQIFESQRMKFSE  IPQRLHALLMPPEPIIINHVISVDPNDQKKTACYDIDVEVDDTLKTQMNSFLLSTASQQEIAALDNKIHE  TIETINQLKTQREFMLSFARDPQGFINDWLQSQCRDLKTMTDVVGNPEEERRAEFYFQPWAQEAVCRYFY  SKVQQRRQELEQALGIRNT | 61.57 |