

**File: /home/ceglab2/Desktop/ajinkya/pavo/MSD/MSD.ctb** **Printed: Feb 16 12:07:45 2022**  
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|                          | *****.*****  |     |
|--------------------------|--|-----|
| Pavo_muticus             | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 120 |
| Pavo_cristatus           | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 120 |
| Gallus_gallus            | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 120 |
| Anas_platyrhynchos       | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Chelonia_mydas           | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Ornithorhynchus_anatinus | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 120 |
| Homo_sapiens             | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Pan_troglodytes          | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Macaca_mulatta           | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Callithrix_jacchus       | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Mus_musculus             | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Equus_caballus           | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Pteropus_alecto          | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Bos_taurus               | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Rhinatrema_bivittatum    | RDGLKLMLLLEVISGERLPKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 119 |
| Xenopus_tropicalis       | RDGLKLMLLLEVISGERLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGN | 117 |
|                          | .....70.....80.....90.....100.....110.....120                |     |

|                          | *****  |     |
|--------------------------|--|-----|
| Pavo_muticus             | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 180 |
| Pavo_cristatus           | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 180 |
| Gallus_gallus            | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 180 |
| Anas_platyrhynchos       | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Chelonia_mydas           | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Ornithorhynchus_anatinus | AKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 180 |
| Homo_sapiens             | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Pan_troglodytes          | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Macaca_mulatta           | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Callithrix_jacchus       | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Mus_musculus             | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Equus_caballus           | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Pteropus_alecto          | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Bos_taurus               | VKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Rhinatrema_bivittatum    | AKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 179 |
| Xenopus_tropicalis       | AKMTLGMiWtIILRFaiQDiSVEETSaKEGLLLWCQRKTAPYKNVNIQNFHISWKDGLGF | 177 |
|                          | .....130.....140.....150.....160.....170.....180             |     |

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|                          | * . ***** :***** :***** :***** :***** :***** :***** :***** :***** :***** :***** :***** :***** :***** :***** : | ** : |
|--------------------------|---|------|
| Pavo_muticus             | RAPENTMQAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSEGK  | 360  |
| Pavo_cristatus           | RAPENTMQAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSEGK  | 360  |
| Gallus_gallus            | RAPENTMQAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSEGK  | 360  |
| Anas_platyrhynchos       | RAPENTMQAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSEGK  | 359  |
| Chelonia_mydas           | RAPENTMQAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSEGK  | 359  |
| Ornithorhynchus_anatinus | RAPENTMQAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSEGK  | 360  |
| Homo_sapiens             | RVPENTMHAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSGR   | 359  |
| Pan_troglodytes          | RVPENTMHAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSGR   | 359  |
| Macaca_mulatta           | RVPENTMHAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSGR   | 359  |
| Callithrix_jacchus       | RVPENTMHAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSGR   | 359  |
| Mus_musculus             | RVPENTMHAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSGR   | 359  |
| Equus caballus           | RAPENTMHAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSGR   | 359  |
| Pteropus_alecto          | RAPENTMHAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSGR   | 359  |
| Bos taurus               | RAPENTMHAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSGR   | 359  |
| Rhinatrema_bivittatum    | RAPENTMQAMQOMEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPTGK  | 359  |
| Xenopus_tropicalis       | RAPENTMQAMQOKLEDFRDYRRLHKPPKVQEKCOLEINFNTLQTCLRLSNRPAFMPSGK   | 357  |
|                          | .....310.....320.....330.....340.....350.....360  |      |

# CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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***** .** .***.***** *****:***:*****.***:*****.***:
Pavo_muticus      MVSDINNAWGGLEQAEGGYEEWLLNEIRRLERLDHLAEKFRQKASIHESWTDGKEAMLQQ 420
Pavo_cristatus    MVSDINNAWGGLEQAEGGYEEWLLNEIRRLERLDHLAEKFRQKASIHESWTDGKEAMLQQ 420
Gallus_gallus     MVSDINNAWGGLEQAEGGYEEWLLNEIRRLERLDHLAEKFRQKASIHESWTDGKEAMLQQ 420
Anas_platyrhynchos MVSDINNAWGGLEQAEGGYEEWLLNEIRRLERLDHLAEKFRQKASIHESWTDGKEAMLQQ 419
Chelonia_mydas    MVSDINNAWGGLEQAEGGYEEWLLNEIRRLERLDHLAEKFRQKASIHESWTDGKEAMLQQ 419
Ornithorhynchus_anatinus MVSDISTAWGGLEQAEGGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLQQ 420
Homo_sapiens      MVSDINNAWGCLEQVEKGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRO 419
Pan_troglodytes   MVSDINNAWGCLEQVEKGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRO 419
Macaca_mulatta    MVSDINNAWGCLEQVEKGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRO 419
Callithrix_jacchus MVSDINNAWGCLEQVEKGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKESMLRO 419
Mus_musculus      MVSDINNAWGCLEQAEGGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRO 419
Equus_caballus    MVSDINNAWGCLEQAEGGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRO 419
Pteropus_alecto   MVSDINNAWGCLEQAEGGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRO 419
Bos_taurus        MVSDINNAWGCLEQAEGGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRO 419
Rhinatrema_bivittatum MVSDICNAWSGLEQAEGGYEEWQLNEIRRLERLEHLADKFRQKACIHEAWTDGKEGMLQQ 419
Xenopus_tropicalis MVSDINNAWGGLEQAEGGYEEWMLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLQK 417
.....370.....380.....390.....400.....410.....420

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.*****:***:***** *****.*****:
Pavo_muticus      KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 480
Pavo_cristatus    KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 480
Gallus_gallus     KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 480
Anas_platyrhynchos KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Chelonia_mydas    KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Ornithorhynchus_anatinus KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 480
Homo_sapiens      KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Pan_troglodytes   KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Macaca_mulatta    KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Callithrix_jacchus KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Mus_musculus      KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Equus_caballus    KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Pteropus_alecto   KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Bos_taurus        KDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Rhinatrema_bivittatum TDYETATLSEIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSPSVNARCQKI 479
Xenopus_tropicalis KDYETASLSIKALLKKHEAFESDLAAHQDRVEQIAAIAQELNELDYDPSQTVNARCQRI 477
.....430.....440.....450.....460.....470.....480

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***** ***** ***** *****
Pavo_muticus      CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 540
Pavo_cristatus    CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 540
Gallus_gallus     CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 540
Anas_platyrhynchos CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 539
Chelonia_mydas    CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 539
Ornithorhynchus_anatinus CDQWDSLGLALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 540
Homo_sapiens      CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 539
Pan_troglodytes   CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 539
Macaca_mulatta    CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 539
Callithrix_jacchus CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 539
Mus_musculus      CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 539
Equus_caballus    CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 539
Pteropus_alecto   CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 539
Bos_taurus        CDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 539
Rhinatrema_bivittatum CDQWDHLGALTQTRREALERTEKLLETIDQLYLECAKRAAPFNNWMEGAMEDLQDTFIVH 539
Xenopus_tropicalis CDQWDNLGALTQQRREALERTEKLLETIDQLYLEYAKRAAPFNNWMEGAMEDLQDTFIVH 537
.....490.....500.....510.....520.....530.....540

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# CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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:***:*** *****:***** *****:***:***:*****:***:***:***
Pavo_muticus      TIEEIQGLTTAHEQFKATLPDADKERQAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 600
Pavo_cristatus    TIEEIQGLTTAHEQFKATLPDADKERQAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 600
Gallus_gallus     TIEEIQGLTTAHEQFKATLPDADKERQAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 600
Anas_platyrhynchos TIEEIQGLTTAHEQFKATLPDADKERQAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 599
Chelonia_mydas    TIEEIQGLTTAHEQFKATLPDADKERQAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 599
Ornithorhynchus_anatinus TIEEIQGLTTAHEQFKATLPDADKERQAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 600
Homo_sapiens      TIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 599
Pan_troglodytes   TIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 599
Macaca_mulatta    TIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 599
Callithrix_jacchus TIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 599
Mus_musculus      TIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 599
Equus_caballus    TIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 599
Pteropus_alecto   AIEEVOGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 599
Bos_taurus        TIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAAGTNPYTTITPQE 599
Rhinatrema_bivittatum TIEEIQGLTTAHEQFKATLPDADKERQAILGIHNEVSKIVQTYHVNMAAGSNPYTTISPOE 599
Xenopus_tropicalis TIEEIQGLTTAHEQFKATLPDADKERQAILGIHNEVSKIVQTYHVNMAAGSNPYTTISITPQE 597
.....550.....560.....570.....580.....590.....600

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**.*:*****:*** **.*:***:*****.***** *****:***:***:***
Pavo_muticus      INGKWEHVRLVPRRDQALMEEHARQQQNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 660
Pavo_cristatus    INGKWEHVRLVPRRDQALMEEHARQQQNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 660
Gallus_gallus     INGKWEHVRLVPRRDQALMEEHARQQQNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 660
Anas_platyrhynchos INGKWEHVRLVPRRDQALMEEHARQQQNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 659
Chelonia_mydas    INGKWDHVRQLVPRRDQALLEHTRQQQNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 659
Ornithorhynchus_anatinus INGKWDHVRQLVPRRDQALMEEHARQQQNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 660
Homo_sapiens      INGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 659
Pan_troglodytes   INGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 659
Macaca_mulatta    INGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 659
Callithrix_jacchus INGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 659
Mus_musculus      INGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 659
Equus_caballus    INGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 659
Pteropus_alecto   INGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 659
Bos_taurus        INGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIE 659
Rhinatrema_bivittatum INSKWDQVRQLVPRRDQALMEEHARQQQNERLRKQFAAQANDIGPWIQSKMQEIGRISIE 659
Xenopus_tropicalis INNKWDHVRQLVPRRDQALTEEHARQQQNERLRKQFAAQANVIGPWIQTKMQEIGRIATIE 657
.....610.....620.....630.....640.....650.....660

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*****:..*****:***.*****.*** *****.*****
Pavo_muticus      MHGTLEDQLNHLRQYEKSIVNYKPKIDQLEGDHQQIQEALIFDNKHTNYTMEHIRVGWEQ 720
Pavo_cristatus    MHGTLEDQLNHLRQYEKSIVNYKPKIDQLEGDHQQIQEALIFDNKHTNYTMEHIRVGWEQ 720
Gallus_gallus     MHGTLEDQLNHLRQYEKSIVNYKPKIDQLEGDHQQIQEALIFDNKHTNYTMEHIRVGWEQ 720
Anas_platyrhynchos MHGTLEDQLNHLRQYEKSIVNYKPKIDQLEGDHQQIQEALIFDNKHTNYTMEHIRVGWEQ 719
Chelonia_mydas    MHGTLEDQLNHLRQYEKSIIINYKPKIDQLEGDHQQIQEALIFDNKHTNYTMEHIRVGWEQ 719
Ornithorhynchus_anatinus MHGTLEDQLNHLRQYEKSIVNYKPKIDQLEGNHQQIQEALIFDNKHTNYTMEHIRVGWEQ 720
Homo_sapiens      MHGTLEDQLSHLRQYEKSIVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQ 719
Pan_troglodytes   MHGTLEDQLSHLRQYEKSIVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQ 719
Macaca_mulatta    MHGTLEDQLSHLRQYEKSIVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQ 719
Callithrix_jacchus MHGTLEDQLSHLRQYEKSIVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQ 719
Mus_musculus      MHGTLEDQLSHLRQYEKSIVNYKPKIDQLEGCDHQLIQEALIFDNKHTNYTMEHIRVGWEQ 719
Equus_caballus    MHGTLEDQLSHLRQYEKSIVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQ 719
Pteropus_alecto   MHGTLEDQLSHLRQYEKSIVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQ 719
Bos_taurus        MHGTLEDQLNHLRQYEKSIVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQ 719
Rhinatrema_bivittatum MHGTLEDQINHLRQYEKSIVSYKPKIDQLEGDHQQIQEALIFDNKHTNYTMEHIRVGWEQ 719
Xenopus_tropicalis MHGTLEDQLNHLRQYEKSIVNYKPKIDQLESDHQQIQEALIFDNKHTNYTMEHIRVGWEQ 717
.....670.....680.....690.....700.....710.....720

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# CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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**** *****:***** **.*
Pavo_muticus          LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDR----- 761
Pavo_cristatus        LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDR----- 761
Gallus_gallus         LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 780
Anas_platyrhynchos    LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Chelonia_mydas        LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Ornithorhynchus_anatinus LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 780
Homo_sapiens          LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Pan_troglodytes       LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Macaca_mulatta        LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Callithrix_jacchus    LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Mus_musculus          LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Equus_caballus        LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Pteropus_alecto       LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Bos_taurus            LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Rhinatrema_bivittatum LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 779
Xenopus_tropicalis    LLTTIARTINEVENQILTRDAKGISQEQMNEFRASFNHFDRDHSGLTGPEEFKACLIISLG 777
.....730.....740.....750.....760.....770.....780

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*****.*****:*****:*****
Pavo_muticus          -----KKTGMMDCEDFRACLI SMGYNMGEAEFARIMSI VDPNRMGVVTFQAFIDFMS 813
Pavo_cristatus        -----KKTGMMDCEDFRACLI SMGYNMGEAEFARIMSI VDPNRMGVVTFQAFIDFMS 813
Gallus_gallus         YDIGNDAQKKTGMMDCEDFRACLI SMGYNMGEAEFARIMSI VDPNRMGVVTFQAFIDFMS 840
Anas_platyrhynchos    YDIGNDAQKKTGMMDCEDFRACLI SMGYNMGEAEFARIMSI VDPNRLGVVTFQAFIDFMS 839
Chelonia_mydas        YDIGNDAQKKTGMMDSEDFRACLI SMGYNMGEAEFARIMSI VDPNRLGVVTFQAFIDFMS 839
Ornithorhynchus_anatinus YDIGNDPQKKTGMMDTEDFRACLI SMGYNMGEAEFARIMSI VDPNRLGVVTFQAFIDFMS 840
Homo_sapiens          YDIGNDPQKKTGMMDTDDFRACLI SMGYNMGEAEFARIMSI VDPNRLGVVTFQAFIDFMS 839
Pan_troglodytes       YDIGNDPQKKTGMMDTDDFRACLI SMGYNMGEAEFARIMSI VDPNRLGVVTFQAFIDFMS 839
Macaca_mulatta        YDIGNDPQKKTGMMDTDDFRACLI SMGYNMGEAEFARIMSI VDPNRLGVVTFQAFIDFMS 839
Callithrix_jacchus    YDIGNDPQKKTGMMDTDDFRACLI SMGYNMGEAEFARIMSI VDPNRLGVVTFQAFIDFMS 839
Mus_musculus          YDIGNDPQ-----GEAEFARIMSI VDPNRLGVVTFQAFIDFMS 817
Equus_caballus        YDIGNDPQKKTGMMDTDDFRACLI SMGYNMGEAEFARIMSI VDPNRLGVVTFQAFIDFMS 839
Pteropus_alecto       YDIGNDPQKKTGMMDTDDFRACLI SMGYNMGEAEFARIMSI VDPNRLGVVTFQAFIDFMS 839
Bos_taurus            YDIGNDPQKKTGMMDTDDFRACLI SMGYNMGEAEFARIMSI VDPNRLGVVTFQAFIDFMS 839
Rhinatrema_bivittatum YDIGNDPQKKTGMMDTEDFRACLI SMGYNMGEAEFVRIMSI IDPNRLGVVTFQAFIDFMS 839
Xenopus_tropicalis    YDIGNDPQKKS GFLESDDFRACLI SMGYNMGEAEFARIMSI VDPNRLGLVTFQAFIDFMS 837
.....790.....800.....810.....820.....830.....840

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Pavo_muticus          RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYNGRDAVPGAL 873
Pavo_cristatus        RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYNGRDAVPGAL 873
Gallus_gallus         RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYNGRDAVPGAL 900
Anas_platyrhynchos    RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYNGRDAVPGAL 899
Chelonia_mydas        RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYSGPDAVPGAL 899
Ornithorhynchus_anatinus RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYSGPDAVPGAL 900
Homo_sapiens          RETADTDTADQVMASFKILAGDKNYITMDELRLRELPPDQAEYCIARMAPYTGPDVPGAL 899
Pan_troglodytes       RETADTDTADQVMASFKILAGDKNYITMDELRLRELPPDQAEYCIARMAPYTGPDVPGAL 899
Macaca_mulatta        RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYTGPDVPGAL 899
Callithrix_jacchus    RETADTDTADQVMASFKILAGDKNYITVEELRLRELPPDQAEYCIARMAPYTGPDVPGAL 899
Mus_musculus          RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYAGPDVPGAL 877
Equus_caballus        RETADTDTADQVMASFKILAGDKNYITMDELRLRELPPDQAEYCIARMAPYAGPDVPGAL 899
Pteropus_alecto       RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYTGPDVPGAL 899
Bos_taurus            RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYTGPDVPGAL 899
Rhinatrema_bivittatum RETADTDTADQVMASFKILAGDKNYITVDELRLRELPPDQAEYCIARMAPYNGHDAVPGAL 899
Xenopus_tropicalis    RETADTDTADQVMASFKILAGDKNYITADELRLRELPPDQAEYCIARMAPYLGPDVPGAL 897
.....850.....860.....870.....880.....890.....900

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## CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /home/ceglab2/Desktop/ajinkya/pavo/MSDAACTW11 Feb 16 12:07:45 2022

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*****
Pavo_muticus      DYMSFSTALYGESDL 888
Pavo_cristatus    DYMSFSTALYGESDL 888
Gallus_gallus     DYMSFSTALYGESDL 915
Anas_platyrhynchos DYMSFSTALYGESDL 914
Chelonia_mydas    DYMSFSTALYGESDL 914
Ornithorhynchus_anatinus DYMSFSTALYGESDL 915
Homo_sapiens      DYMSFSTALYGESDL 914
Pan_troglodytes   DYMSFSTALYGESDL 914
Macaca_mulatta    DYMSFSTALYGESDL 914
Callithrix_jacchus DYMSFSTALYGESDL 914
Mus_musculus      DYMSFSTALYGESDL 892
Equus_caballus    DYMSFSTALYGESDL 914
Pteropus_alecto   DYMSFSTALYGESDL 914
Bos_taurus        DYMSFSTALYGESDL 914
Rhinatrema_bivittatum DYMSFSTALYGESDL 914
Xenopus_tropicalis DYMSFSTALYGESDL 912
.....910.....
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