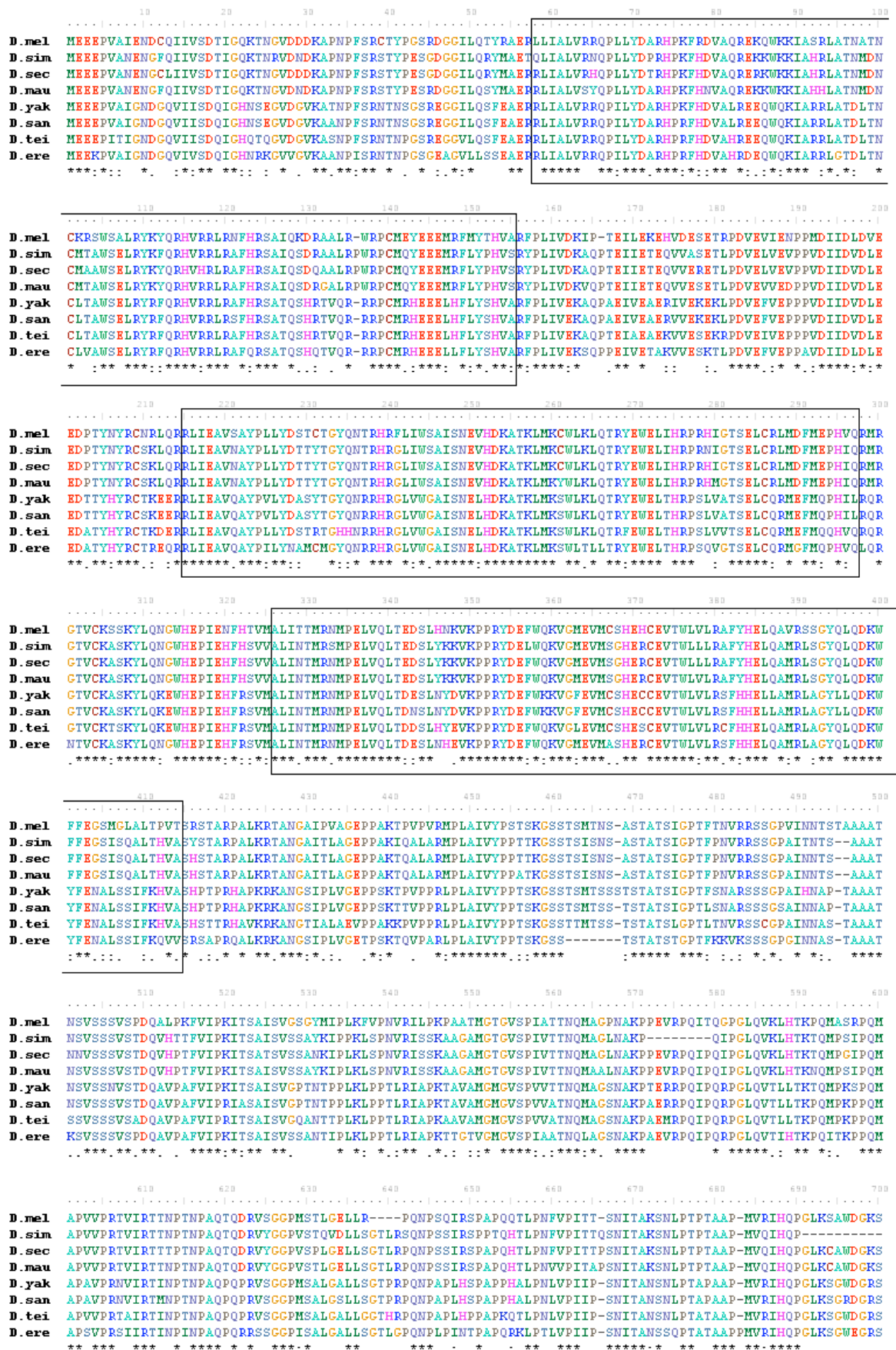


Figure S2




```

      1410      1420      1430      1440      1450      1460      1470      1480      1490      1500
.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|
D.mel RASTLDKRAAWVRVSKELHATVTECRLGLQYALREMRNLKIADPSNQCTMCHKYLHHMSEIYRQVKPNAQLTVRTPQQLNQLNESLAKNT-QEVSPOEFL
D.sim RASTLDKRTAWVRVSKELNATVTDCLRLGLQYALREMRNLKIMADPNNQCTMCHKYLHHMSEIYRQVKPNAQLTVRTPQQLNQLNKSLEKNT-EEVKPLEFL
D.sec QASTLDKRTAWVRVSKELNATVTDCLRLGLQYALREMRNLKIADPNNQCTMCHKYLHHMSEIYRQVKPNAQLTIRTPQQLNQLNKSLEKNT-EEVKPQEFLL
D.mau RASTLDKRTAWVRVSKELNATVTDCLRLGLQYALREMRNLKIADPNNQCTMCHKYLHHMSEIYRQVKPNAQLTVRTPQQLNQLNKSLEKNT-EEVKPQEFLL
D.yak RASTINKRTAWVRVSNELNATVTECRLGLQYALREMRNLKIADPNNQCAMGCHKYFHHMSEIYRQVKPNCQLIVRTPQQLNQLNQSPEVTAEEVKPRGFL
D.san RASTINKRTAWVRVSNELNATVTECRLGLQYALREMRNLKIADPNNQCAMGCHKYFHHMSEIYRQVKPNCQLIVRTPQQLNQLNQSPEVTAEEVKPRGFL
D.tei QASTIDKRTAWVRVSKELNATVTECRLGLQYALREMRNLKIADPNNQCAMGCHKYFHHMSEIYRQVKPNCQLIVRTPQQLNQLNQSPEVTAEEVKPRGFL
D.ere RASTIDKRTAWVRVSKELNATVTECRLGLQYALREMRNLKIADPNNQCTMCHKYLHHMSEIYRQVKPNCQLIVRTPQQLNQLNQSISEVTAEEVKPSGFL
:***:.*:*****:.*:***:*****:*****:.* ***.**.*:*****:.* **.:*****:.* :.*:*. **

```

putative BESS

```

      1510      1520      1530      1540      1550
.....|.....|.....|.....|.....|
D.mel PEINLSTCSPDLVVRKNWAYAVCNLSTASQDTLLGKMTQLFSKYAK-VNPPPP
D.sim PEINLSTCSPDLVVRKNWSYAVCNLSTASQDALLGKMTQLFSKYAKKANPPPP
D.sec PEINFSTCSPDLVVRKNWYAVCNLSTASQDALLGKMTQLFSKYAKKVNPPPP
D.mau PEINLSTCSPDLVVRKNWAYAVCNLSTASQDALLGKMTQLFSKYAKKVNPPPP
D.yak PEINVTTCSPELVVRKNWAHAACNLSAPNQDTLQVFKLTQVFSKYAKKVNPTAP
D.san PEINVTTCSPELVVRKNWAHAACNLSAPSQDTLQVFKLTQVFSKYAKKVNPTAP
D.tei PEINLTTCSPELVVRKNWAHAACNLSAPSQDTLQVFKLTQVFSKYAKQVNPTPP
D.ere PEINLTTCSPELVVRKNWAYAVCNLSAASQDTLLARLTQLFSKYAKVVDSTQP
****:****:*****:.*:*****:..**:*:.*:*****:..* **

```