

Figure S4

A

```
Deide_20641 -----MTNPYAWEFQRLRKEYGEQLGSMPLPEGLPEHLRALIDQHDEEAIQFMIK 50
Dgeo_0322 -----MTNPYAWEFQRLRAEYGEQLKAMPLPDGLPEYLRDLIEARDEEAILFMIK 50
revDR_0438 MPKPSVSSQPAPNPYAWEFQRLRSEYGDQLSAMPLPDGLPEHLRNLI EQGDEDAIQFMVR 60
               .***** **:* :*:*:*:*:** **:* **:* **:*:

Deide_20641 LAWQFGAQVGYAAGSRQNAAPAYPRPGRVQA 82
Dgeo_0322 LAWQFGAQVGYAAGARQGQAARPTTRPGHVQA 82
revDR_0438 LAWQLGAQVGYAAGSRRQDVHAPPKRSQNVQA 92
               ****:*:*****:*: . . *.*.***
```

B

```
DR_0438 -----MHVLA-----AAAGVVDLGAELPGEFDHKLNGVLLVALLDQVSQVL 41
revDgeo_0322 VGAVLRSSLDVTRPGRGSGRLSLSGSGGVTHLGPPELPGKFDHKQDGGFFVPRLDQVAQIL 60
revDeide_20641 -----VGSGLNAARPWVSRRCRILSASGGIAHLRAKLPQFDHELNSFFVMLINQGPQMF 55
               :.. :*:*:*. *:*: **:* :*:*. **:* .*:

DR_0438 GQTVGQGHGAELVAVFAELLEPLGVRVRRGLARDGRLRHGLNLTQAHSRNVSQKAV 98
revDgeo_0322 REAVGKRHGLELLAVLRAELLEPLGVGIR-----HTSILTPTHSRNVSGAKG 107
revDeide_20641 WQPFQWHGPELLTILLAKLLEPLGIGVR-----HVSYLNITALKECNSGS- 101
               :..*:* ** *:*: :*:*****: * * * . : : .
```