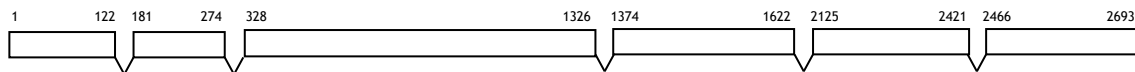
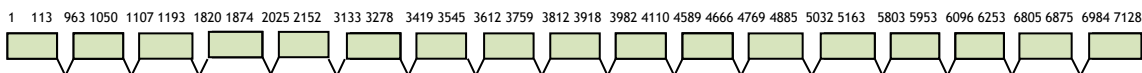


A. *C. elegans emb-8*



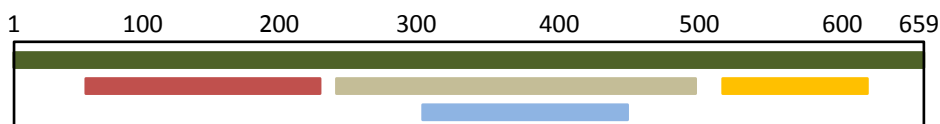
*Hc emb-8*



B.

|          |   |     |
|----------|---|-----|
| Ce EMB-8 | MLAWIVSGLDTSDLVVLTLLAGGAIIFLFMKVFNQFPSSSRYSPTVASVITSAARSKSNQ                              | 60  |
| Hc EMB-8 | MWDVLVSQLDVTDFIILSALMLGMYFLVKYRLG---GTSRYKPTMTPIPTAKPK--DM                                | 55  |
|          | * ** * * * : * : * * : * * : : * : * : * : * : * : * : * : * : * : * : * : *              |     |
| Ce EMB-8 | SFIDRMKNENRQVLMYGSQTGAEEMSGRLAKDLTRYTKKAVVDPEDIECEDLNRLSE                                 | 120 |
| Hc EMB-8 | SFISRMKNENRQVLMYGSQTGAEEELSGRLAKDVSRYAKKALIVDPEEIVDDMARLSE                                | 115 |
|          | * * * * * : * |     |
| Ce EMB-8 | VEDALLVLCIATYEGGDFPTDNAVTLVEYLNAGDCLSGVRFVAVFGLGNKTYEHNFGIQL                              | 180 |
| Hc EMB-8 | IKDCLVVFCAIYEGGDFPTDQAQLYIYITTTDIDFKGVNYAVFGLGNKTYEHNNAVQKL                               | 175 |
|          | : *   |     |
| Ce EMB-8 | MDKQLEKLGAKRIFHLGLGDDANLEEDFMINREAFLPKVAEEFGWELNTEAETMRQYQL                               | 240 |
| Hc EMB-8 | FDKQLEELGAERAFPLGLGDDANLEEDFMRNREAFLPVAQRFGEELNTDAETLRQYRL                                | 235 |
|          | : * : * : * : * : * |     |
| Ce EMB-8 | EPVEEGK--ALFKGEFGRGLGAYERPRPPFDVKNPYLATVAINDELHTEHSDRSCRHIEFS                             | 298 |
| Hc EMB-8 | ELVDHNAVTLFKGEYGRGAFERLRPPFDQKNPPFATIAVNRLEHTEKSERSCRHIEFA                                | 295 |
|          | * * : *   |     |
| Ce EMB-8 | VEGSRIRYEAGDHLAVFPNTDPELVDRINMLQFDPDHAFLRVNVEDASKRHPPFCPT                                 | 358 |
| Hc EMB-8 | VEGSRIRYEAGDHLAVFPNTDPELVDAVISLLDFDPEQAFRLINVEESSKRNPFPCCPT                               | 355 |
|          | * * * * * : * |     |
| Ce EMB-8 | FRITALSHYVDICAPKSHVLKAISEYCTDDTEKEFLNKLSTANEGLKEYARIYIVKERRS                              | 418 |
| Hc EMB-8 | YRALTHTYVDICAPKSHVLKAISEYCSDEKEKAYLQLLSTATEEGLKEYSSYIVKERRS                               | 415 |
|          | : * * * : *     |     |
| Ce EMB-8 | IVDVLTDQKTCPPPIEYLLLELLPRLQARYYSIASSPRINEKIAICAVVTKYSIGDRDIN                              | 478 |
| Hc EMB-8 | IIDVLRARHPSCPPPIEYLLLELLPRLQARYYSIASSPKHQENRIACCIVTKYITGDRLIK                             | 475 |
|          | * : * * * : * |     |
| Ce EMB-8 | GVCTRYLTTKDGSKSPVFRKSTMRLPHRTTQVIMIGFGTGFAPFRGLQDRQFHNA                                   | 538 |
| Hc EMB-8 | GVCTNYLAGKEVNDRTPVFVRKSMRLPHRTNTPVIMIGFGTGFAPFRFLQERKFKQD                                 | 535 |
|          | * * * * * : * |     |
| Ce EMB-8 | GKEIGAMHLYGCRHPDHDYIYKDELAKFQEDVLTHLVCAFSAQEHKIYVQDRLNEIR                                 | 598 |
| Hc EMB-8 | GKEIGPIMLYGCRHPEHDYIYQDEIEEMVKDGVITDLYCAFSAQEHKIYVQDRLNEIR                                | 595 |
|          | * * * * * : * |     |
| Ce EMB-8 | DRIVDAINVGAHYICGDARNMARDVQATLQKIFREIGGKSETEAVAYFKDMEKTKRYQA                               | 658 |
| Hc EMB-8 | DRVWSAIEAGAHYVCGDARNMARDVQNVLLRILQEVGGKSEESATLQKINLERQRRYQA                               | 655 |
|          | * : *     |     |
| Ce EMB-8 | DVNS  | 662 |
| Hc EMB-8 | DVNS  | 659 |
|          | * * * *   |     |

C. *Hc EMB-8*



NADPH-cytochrome P450 reductase family

Flavoprotein-like domain, flavodoxin/nitric oxide synthase domain

Riboflavin synthase-like beta barrel, ferredoxin reductase-type FAD-binding domain

NADPH-cytochrome P450 reductase, FAD-binding, alpha-helical domain

Oxidoreductase FAD/NAD(P)-binding domain