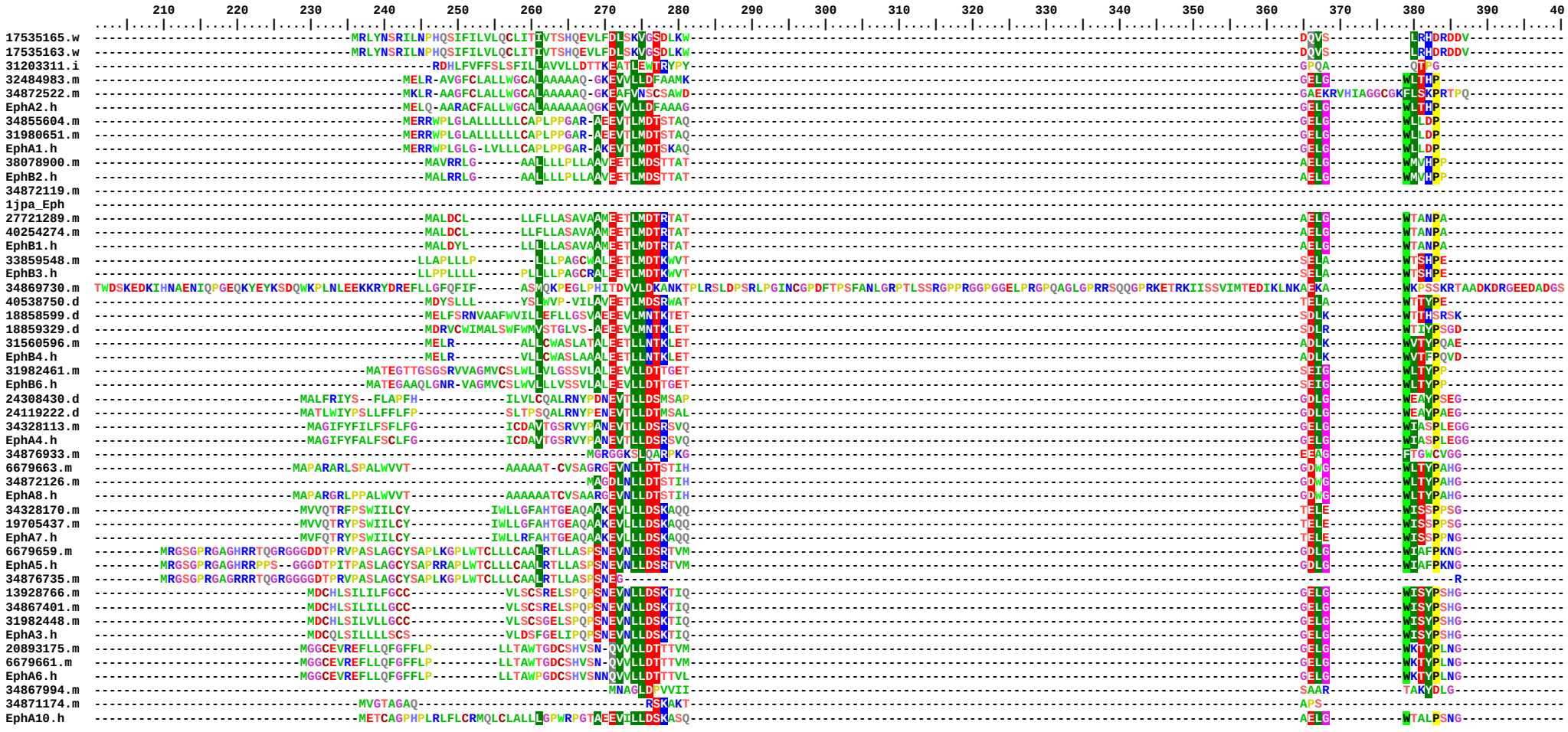
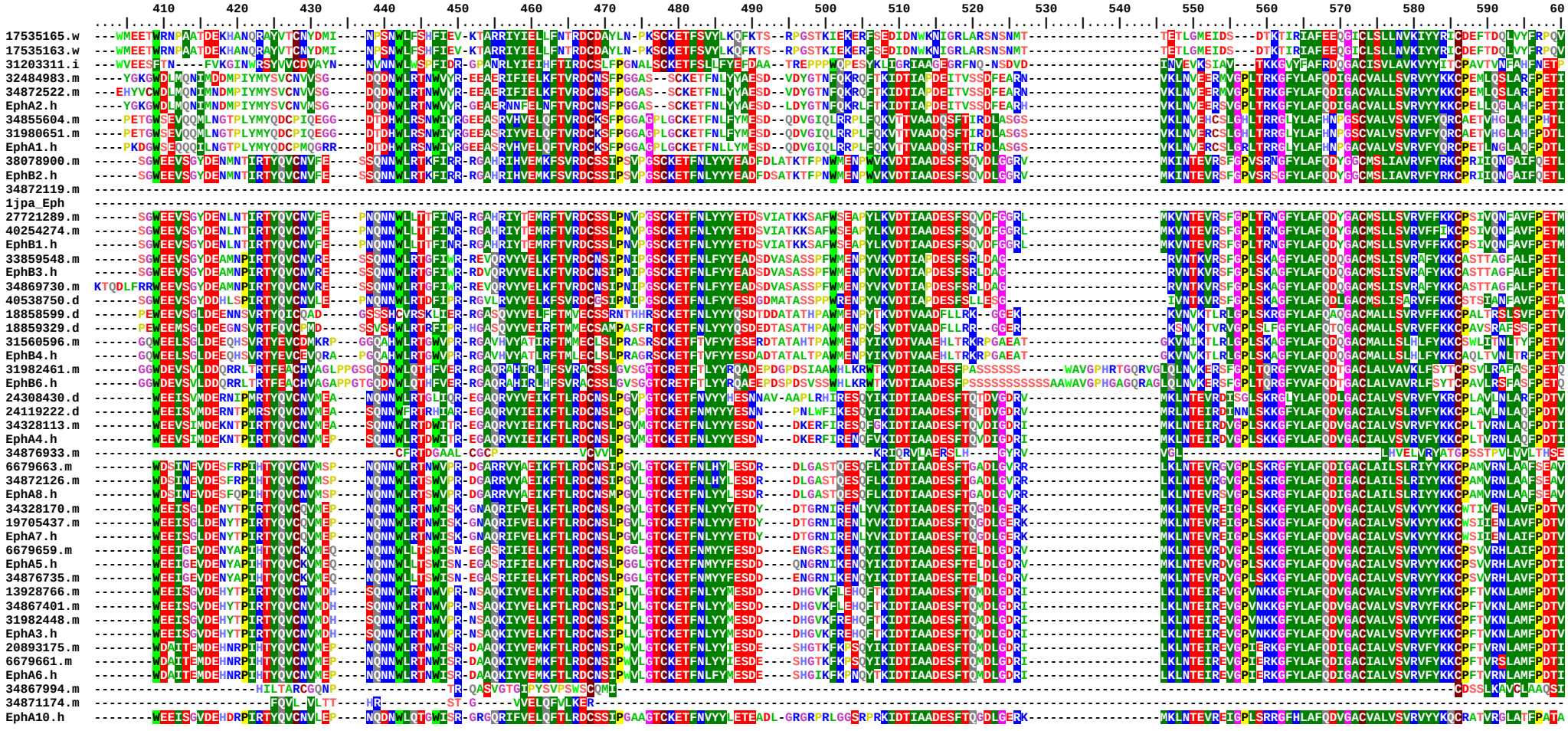
Eph A and B family kinases

```
                 10        20        30        40        50        60        70        80        90       100       110       120       130       140       150       160       170       180       190       20
                 ....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|
17535165.w       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
17535163.w       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
31203311.i       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
32484983.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34872522.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphA2.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34855604.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
31980651.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphA1.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
38078900.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphB2.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34872119.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
1jpa_Eph         ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
27721289.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
40254274.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphB1.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
33859548.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphB3.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34869730.m       MNTRIVAQKEWDHCYIQSLAGVIPKEDSLALKTKLTLTTTQAVSTSLVPHRAETHEPNGVIPSEDLEPEVESSTEPAPPPLSACASESLVPIAPTAQPEELLNGAPSPPAVDLSPVSEPEEQAKENLEVAAAPQVAVSVPKRRRKIKELNKKEAVGDLLDAFKEVDPAVPEVENQPPTGSNPSPESEGSAALPQPEEAEE
40538750.d       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
18858599.d       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
18859329.d       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
31560596.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphB4.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
31982461.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphB6.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
24308430.d       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
24119222.d       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34328113.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphA4.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34876933.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
6679663.m        ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34872126.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphA8.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34328170.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
19705437.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphA7.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
6679659.m        ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphA5.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34876735.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
13928766.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34867401.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
31982448.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphA3.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
20893175.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
6679661.m        ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphA6.h          ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34867994.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
34871174.m       ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
EphA10.h         ------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
```

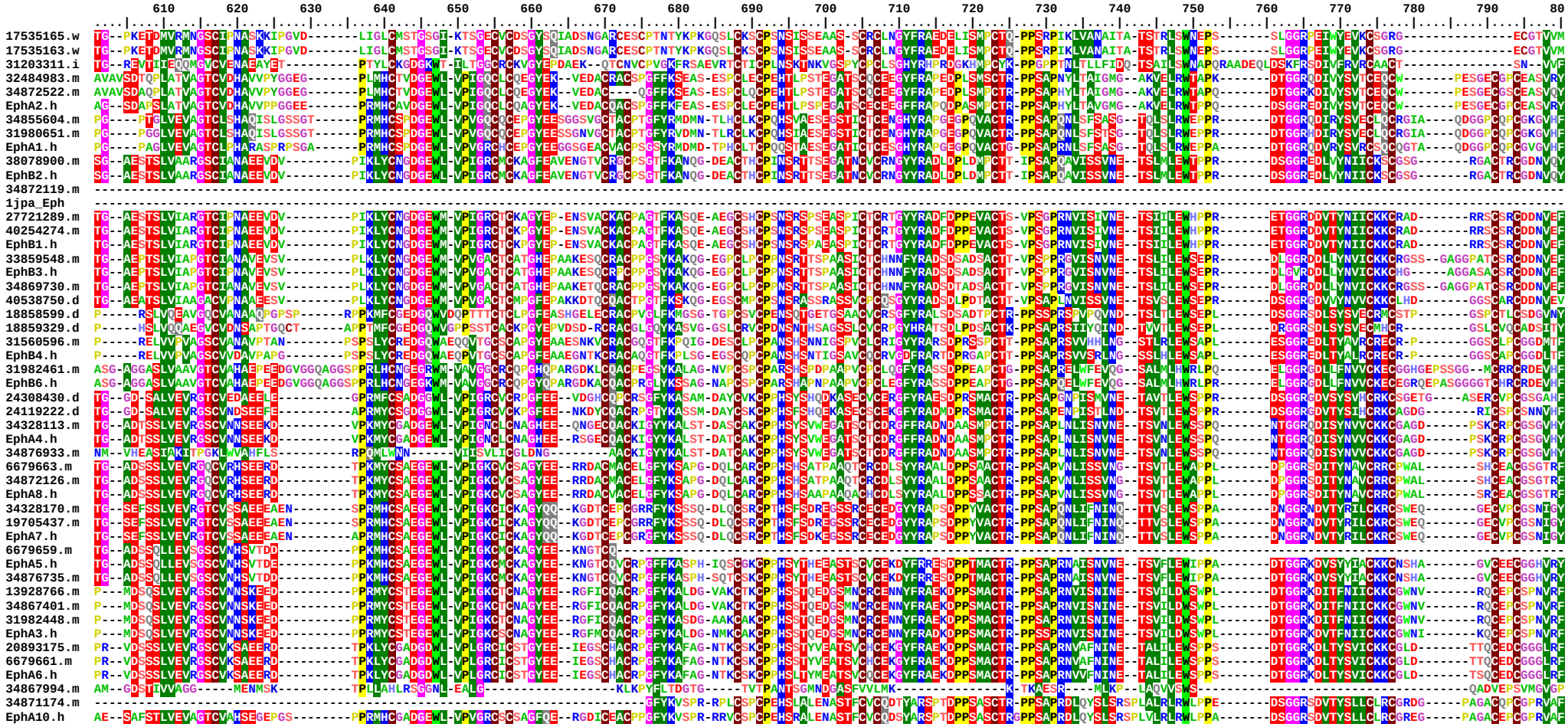
|← . . . Jun-like transcription factor (E=.38) . . . . . →|

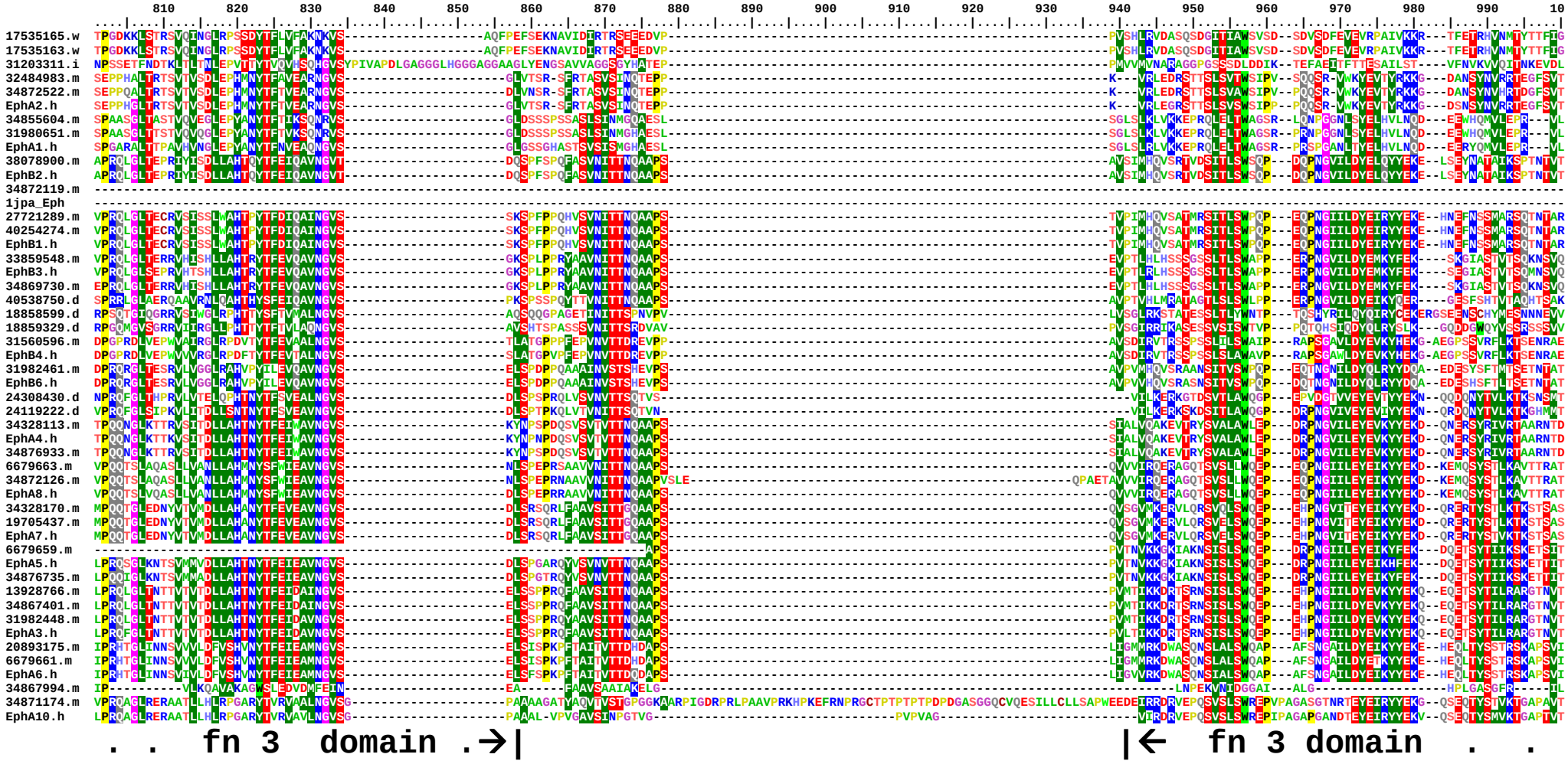


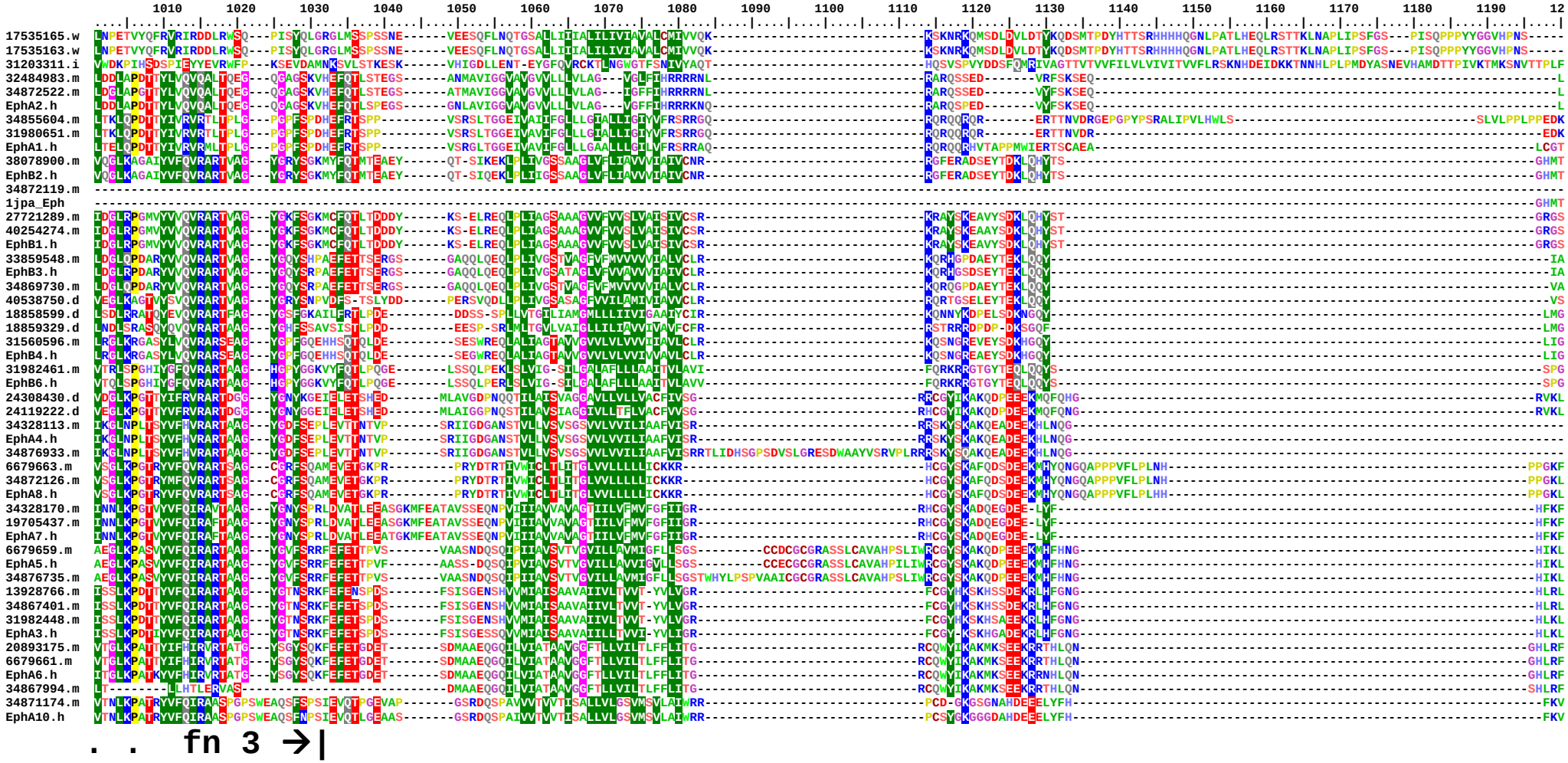
|← Ephrin receptor ligand binding domain . . .



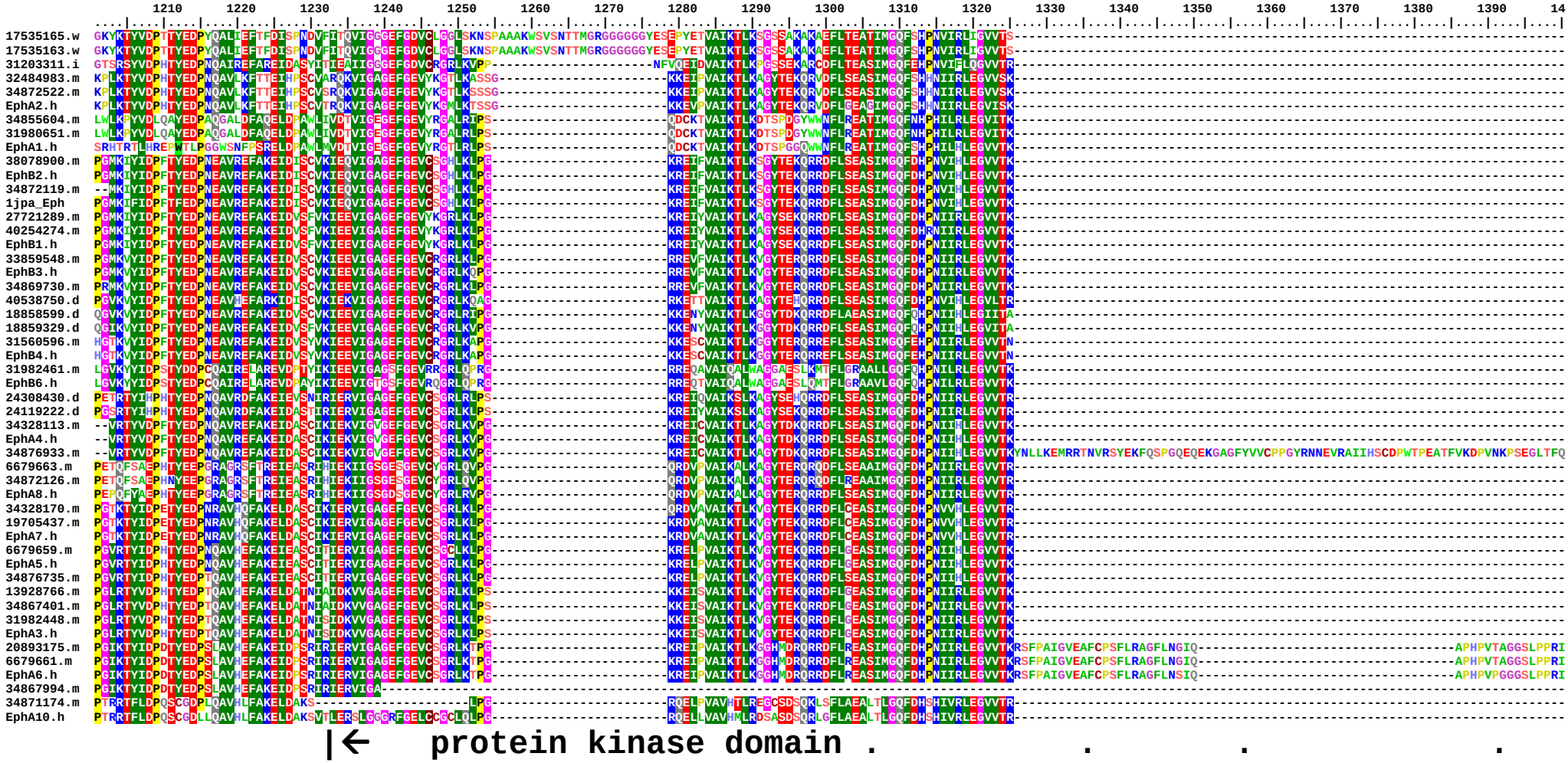
. . Ephrin ligand binding domain →|

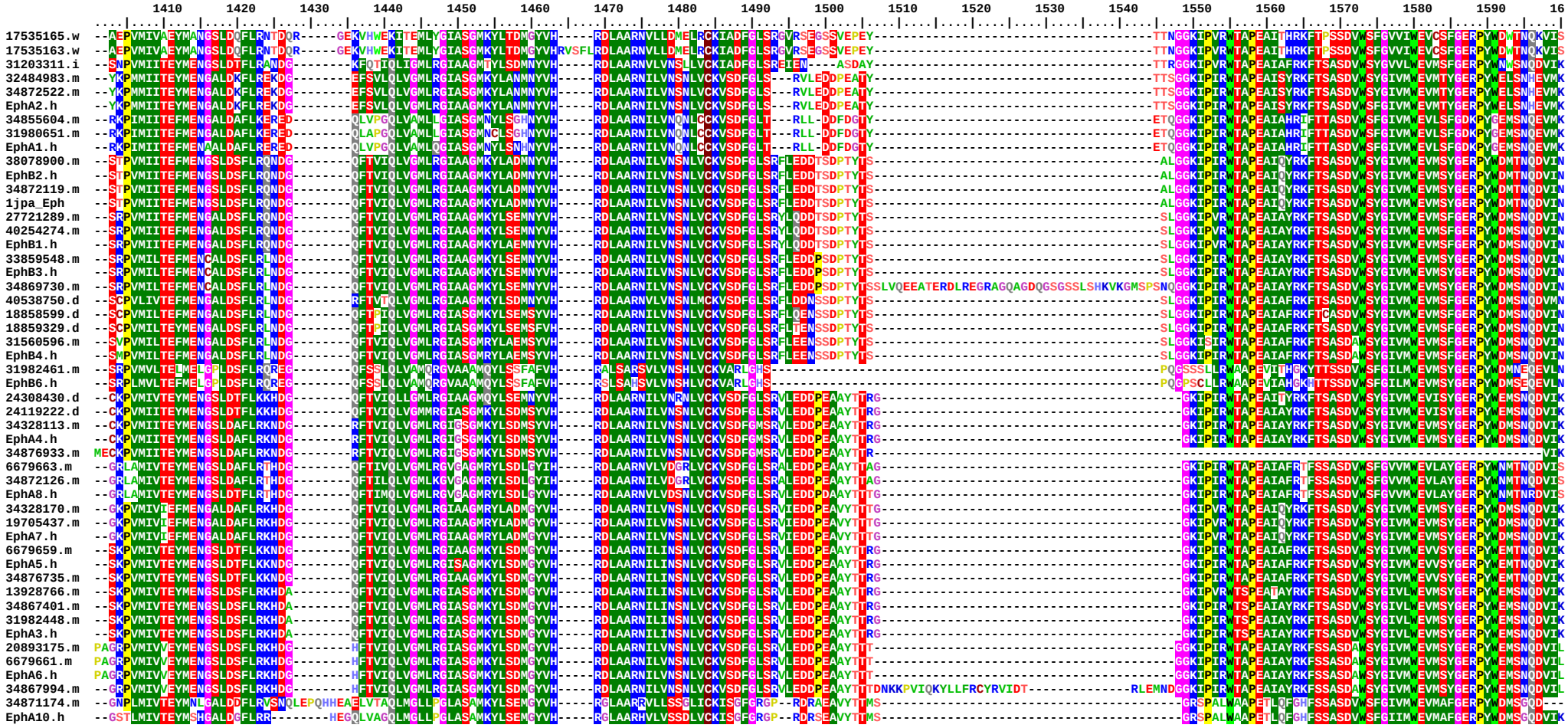

610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 80
17535165.w
17535163.w
31203311.i
32484983.m
34872522.m
EphA2.h
34855604.m
31980651.m
EphA1.h
38078900.m
EphB2.h
34872119.m
1jpa_Eph
27721289.m
40254274.m
EphB1.h
33859548.m
EphB3.h
34869730.m
40538750.d
18858599.d
18859329.d
31560596.m
EphB4.h
31982461.m
EphB6.h
24308430.d
24119222.d
34328113.m
EphA4.h
34876933.m
6679663.m
34872126.m
EphA8.h
34328170.m
19705437.m
EphA7.h
6679659.m
EphA5.h
34876735.m
13928766.m
34867401.m
31982448.m
EphA3.h
20893175.m
6679661.m
EphA6.h
34867994.m
34871174.m
EphA10.h
|← TNFR_C6 →|
|← Laminin_EGF . . .→|
|← fn3 domain . . .

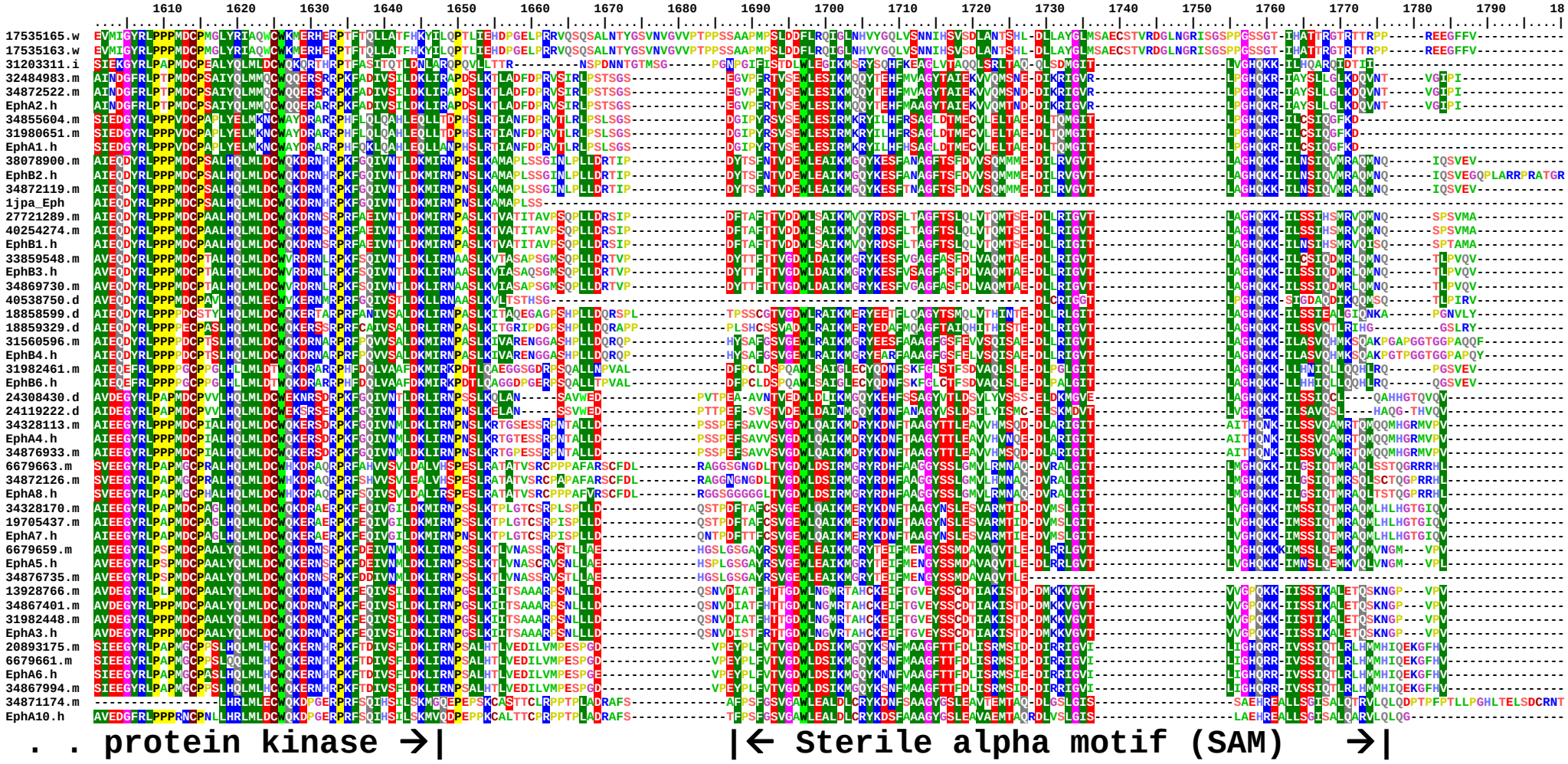

17535165.w
17535163.w
31203311.i
32484983.m
34872522.m
EphA2.h
34855604.m
31980651.m
EphA1.h
38078900.m
EphB2.h
34872119.m
1jpa_Eph
27721289.m
40254274.m
EphB1.h
33859548.m
EphB3.h
34869730.m
40538750.d
18858599.d
18859329.d
31560596.m
EphB4.h
31982461.m
EphB6.h
24308430.d
24119222.d
34328113.m
EphA4.h
34876933.m
6679663.m
34872126.m
EphA8.h
34328170.m
19705437.m
EphA7.h
6679659.m
EphA5.h
34876735.m
13928766.m
34867401.m
31982448.m
EphA3.h
20893175.m
6679661.m
EphA6.h
34867994.m
34871174.m
EphA10.h
. . fn 3 domain .→|
|← fn 3 domain . .


1010 1020 1030 1040 1050 1060 1070 1080 1090 1100 1110 1120 1130 1140 1150 1160 1170 1180 1190 12
17535165.w
17535163.w
31203311.i
32484983.m
34872522.m
EphA2.h
34855604.m
31980651.m
EphA1.h
38078900.m
EphB2.h
34872119.m
1jpa_Eph
27721289.m
40254274.m
EphB1.h
33859548.m
EphB3.h
34869730.m
40538750.d
18858599.d
18859329.d
31560596.m
EphB4.h
31982461.m
EphB6.h
24308430.d
24119222.d
34328113.m
EphA4.h
34876933.m
6679663.m
34872126.m
EphA8.h
34328170.m
19705437.m
EphA7.h
6679659.m
EphA5.h
34876735.m
13928766.m
34867401.m
31982448.m
EphA3.h
20893175.m
6679661.m
EphA6.h
34867994.m
34871174.m
EphA10.h

. . fn 3 →|


1210 1220 1230 1240 1250 1260 1270 1280 1290 1300 1310 1320 1330 1340 1350 1360 1370 1380 1390 14
17535165.w
17535163.w
31203311.i
32484983.m
34872522.m
EphA2.h
34855604.m
31980651.m
EphA1.h
38078900.m
EphB2.h
34872119.m
1jpa_Eph
27721289.m
40254274.m
EphB1.h
33859548.m
EphB3.h
34869730.m
40538750.d
18858599.d
18859329.d
31560596.m
EphB4.h
31982461.m
EphB6.h
24308430.d
24119222.d
34328113.m
EphA4.h
34876933.m
6679663.m
34872126.m
EphA8.h
34328170.m
19705437.m
EphA7.h
6679659.m
EphA5.h
34876735.m
13928766.m
34867401.m
31982448.m
EphA3.h
20893175.m
6679661.m
EphA6.h
34867994.m
34871174.m
EphA10.h
|← protein kinase domain . . . .


1410 1420 1430 1440 1450 1460 1470 1480 1490 1500 1510 1520 1530 1540 1550 1560 1570 1580 1590 16
17535165.w
17535163.w
31203311.i
32484983.m
34872522.m
EphA2.h
34855604.m
31980651.m
EphA1.h
38078900.m
EphB2.h
34872119.m
1jpa_Eph
27721289.m
40254274.m
EphB1.h
33859548.m
EphB3.h
34869730.m
40538750.d
18858599.d
18859329.d
31560596.m
EphB4.h
31982461.m
EphB6.h
24308430.d
24119222.d
34328113.m
EphA4.h
34876933.m
6679663.m
34872126.m
EphA8.h
34328170.m
19705437.m
EphA7.h
6679659.m
EphA5.h
34876735.m
13928766.m
34867401.m
31982448.m
EphA3.h
20893175.m
6679661.m
EphA6.h
34867994.m
34871174.m
EphA10.h
protein kinase domain


1610 1620 1630 1640 1650 1660 1670 1680 1690 1700 1710 1720 1730 1740 1750 1760 1770 1780 1790 18
17535165.w
17535163.w
31203311.i
32484983.m
34872522.m
EphA2.h
34855604.m
31980651.m
EphA1.h
38078900.m
EphB2.h
34872119.m
1jpa_Eph
27721289.m
40254274.m
EphB1.h
33859548.m
EphB3.h
34869730.m
40538750.d
18858599.d
18859329.d
31560596.m
EphB4.h
31982461.m
EphB6.h
24308430.d
24119222.d
34328113.m
EphA4.h
34876933.m
6679663.m
34872126.m
EphA8.h
34328170.m
19705437.m
EphA7.h
6679659.m
EphA5.h
34876735.m
13928766.m
34867401.m
31982448.m
EphA3.h
20893175.m
6679661.m
EphA6.h
34867994.m
34871174.m
EphA10.h
. . protein kinase →|
|← Sterile alpha motif (SAM) →|

```
                    1810      1820      1830      1840      1850      1860      1870      1880      1890      1900      1910
           ....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|....|
17535165.w ------------------------------------------------------------------------------------------------------------------
17535163.w ------------------------------------------------------------------------------------------------------------------
31203311.i ------------------------------------------------------------------------------------------------------------------
32484983.m ------------------------------------------------------------------------------------------------------------------
34872522.m ------------------------------------------------------------------------------------------------------------------
EphA2.h    ------------------------------------------------------------------------------------------------------------------
34855604.m ------------------------------------------------------------------------------------------------------------------
31980651.m ------------------------------------------------------------------------------------------------------------------
EphA1.h    ------------------------------------------------------------------------------------------------------------------
38078900.m ------------------------------------------------------------------------------------------------------------------
EphB2.h    TKRCQPRDVTKKTCNSNDGKKKGMGKKKTDPGRGREIQGIFFKEDSHKESNDCSCGG-----------------------------------------------------
34872119.m ------------------------------------------------------------------------------------------------------------------
1jpa_Eph   ------------------------------------------------------------------------------------------------------------------
27721289.m ------------------------------------------------------------------------------------------------------------------
40254274.m ------------------------------------------------------------------------------------------------------------------
EphB1.h    ------------------------------------------------------------------------------------------------------------------
33859548.m ------------------------------------------------------------------------------------------------------------------
EphB3.h    ------------------------------------------------------------------------------------------------------------------
34869730.m ------------------------------------------------------------------------------------------------------------------
40538750.d ------------------------------------------------------------------------------------------------------------------
18858599.d ------------------------------------------------------------------------------------------------------------------
18859329.d ------------------------------------------------------------------------------------------------------------------
31560596.m ------------------------------------------------------------------------------------------------------------------
EphB4.h    ------------------------------------------------------------------------------------------------------------------
31982461.m ------------------------------------------------------------------------------------------------------------------
EphB6.h    ------------------------------------------------------------------------------------------------------------------
24308430.d ------------------------------------------------------------------------------------------------------------------
24119222.d ------------------------------------------------------------------------------------------------------------------
34328113.m ------------------------------------------------------------------------------------------------------------------
EphA4.h    ------------------------------------------------------------------------------------------------------------------
34876933.m ------------------------------------------------------------------------------------------------------------------
6679663.m  ------------------------------------------------------------------------------------------------------------------
34872126.m ------------------------------------------------------------------------------------------------------------------
EphA8.h    ------------------------------------------------------------------------------------------------------------------
34328170.m ------------------------------------------------------------------------------------------------------------------
19705437.m ------------------------------------------------------------------------------------------------------------------
EphA7.h    ------------------------------------------------------------------------------------------------------------------
6679659.m  ------------------------------------------------------------------------------------------------------------------
EphA5.h    ------------------------------------------------------------------------------------------------------------------
34876735.m ------------------------------------------------------------------------------------------------------------------
13928766.m ------------------------------------------------------------------------------------------------------------------
34867401.m ------------------------------------------------------------------------------------------------------------------
31982448.m ------------------------------------------------------------------------------------------------------------------
EphA3.h    ------------------------------------------------------------------------------------------------------------------
20893175.m ------------------------------------------------------------------------------------------------------------------
6679661.m  ------------------------------------------------------------------------------------------------------------------
EphA6.h    ------------------------------------------------------------------------------------------------------------------
34867994.m ------------------------------------------------------------------------------------------------------------------
34871174.m GVDWDTAPFDRTGGIETSPHDLPSSSLQGKLAQRPRLLGTSSALFWVIRTSSPSPATSVIKVKLLPSPAVCRGVPGCAGRTSVSRVDLPSDEEVLESRGVPGLSPAQAPA
EphA10.h   ------------QGVQV-------------------------------------------------------------------------------------------
```