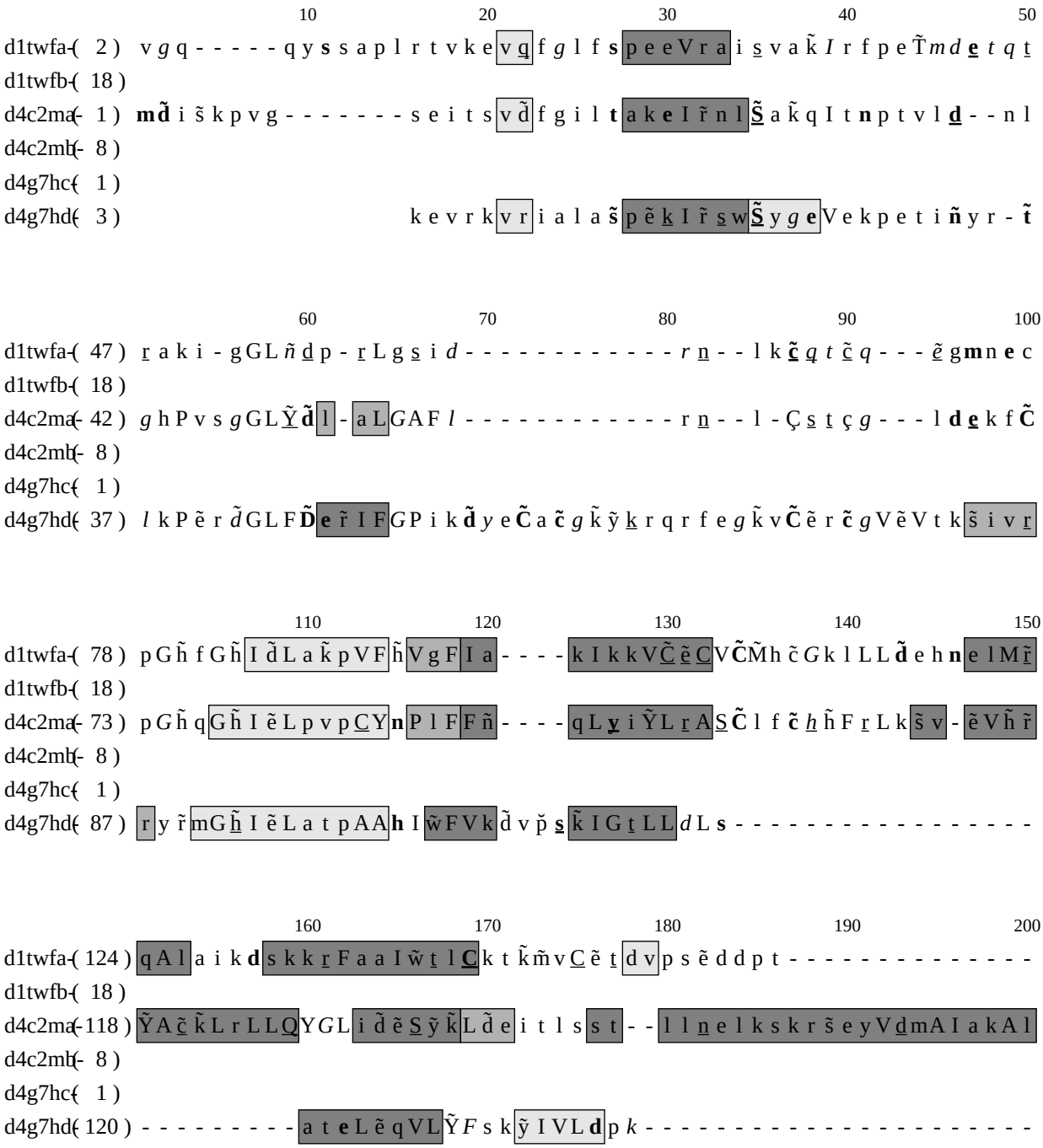
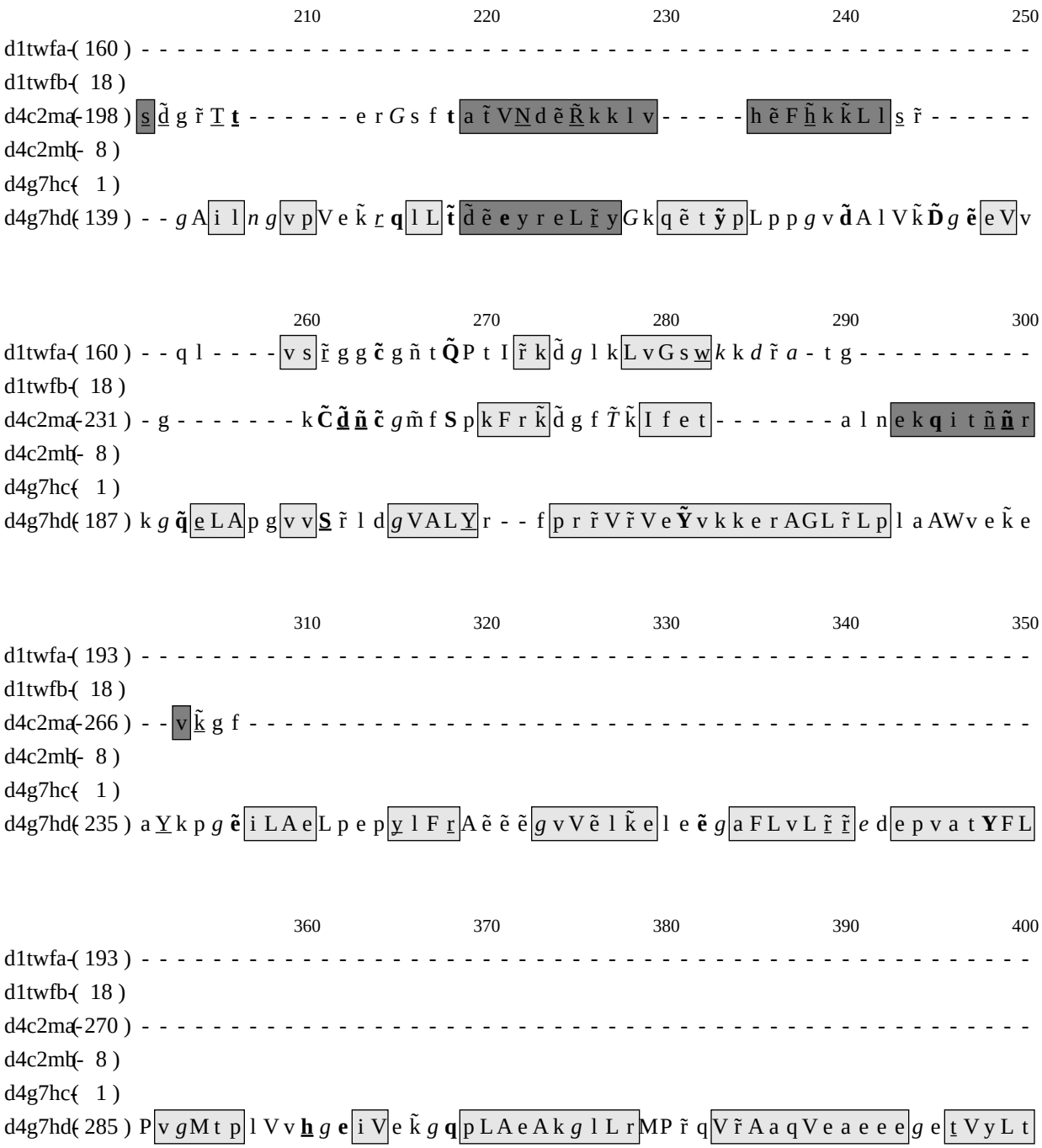
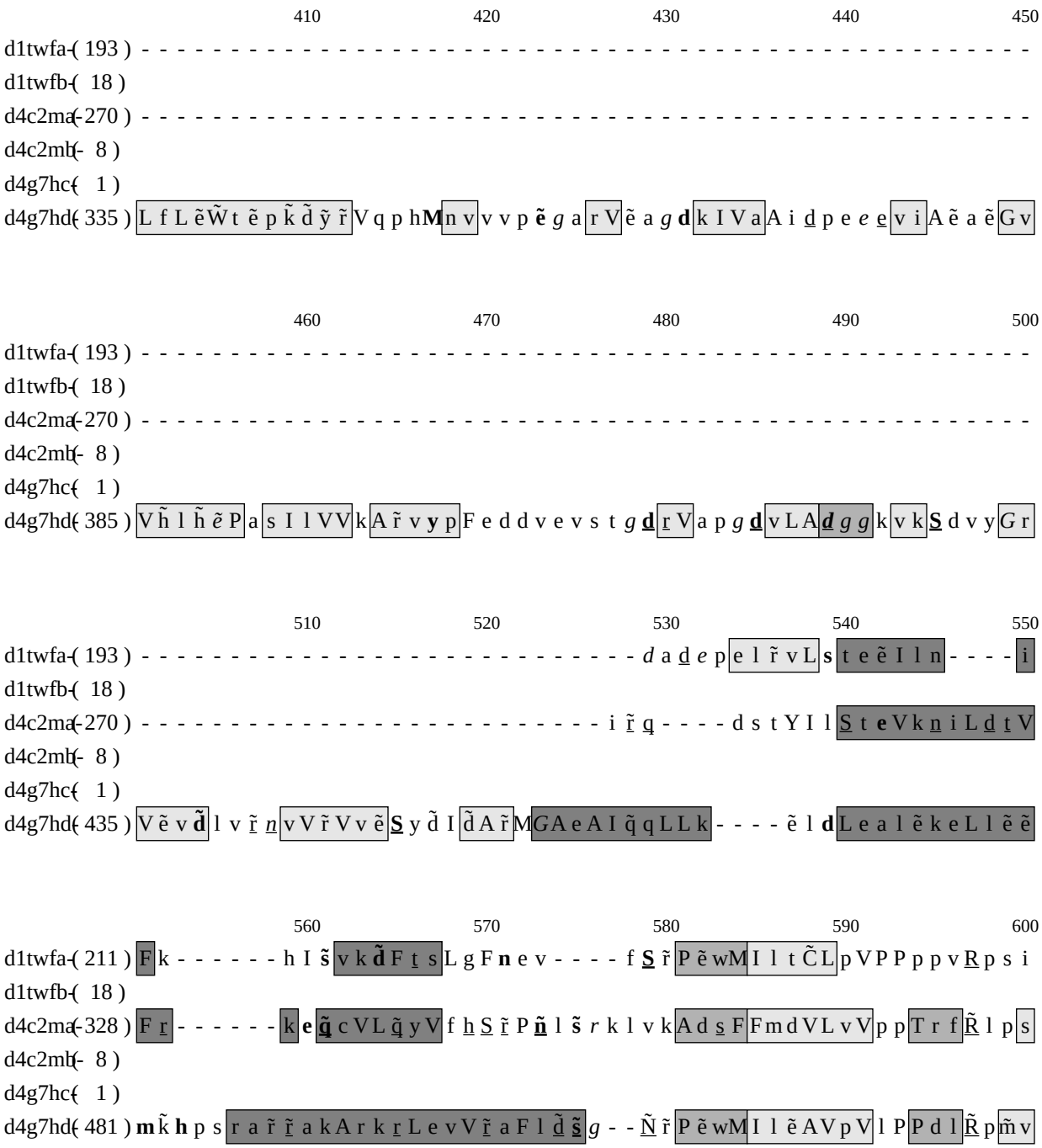
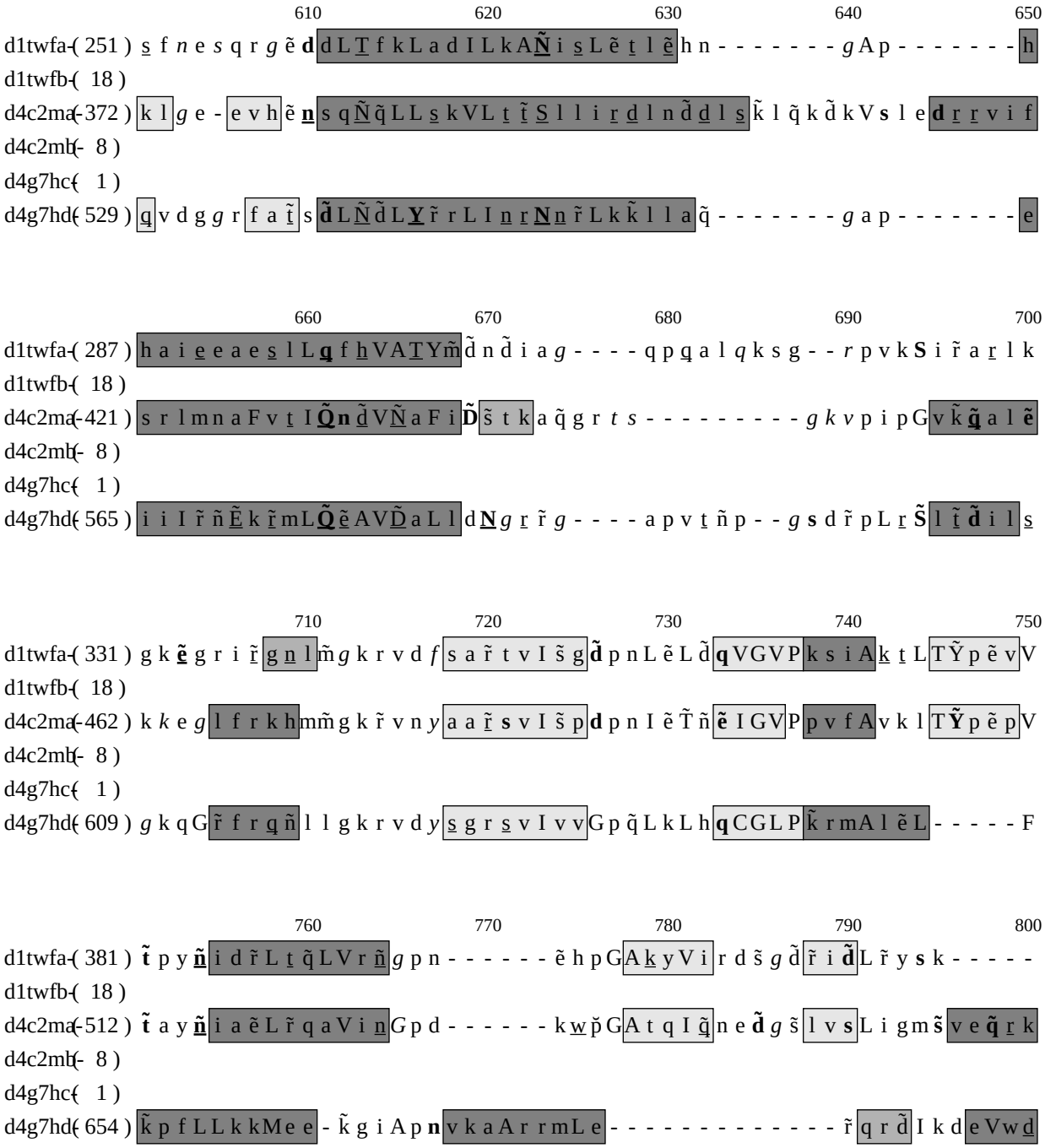

10 20 30 40 50
d1twfa-(2) v g q - - - - - q y s s a p l r t v k e v q f g l f s p e e V r a i s v a k I r f p e T m d e t q t
d1twfb-(18)
d4c2ma-(1) m d i s k p v g - - - - - - - s e i t s v d f g i l t a k e I r n l S a k q I t n p t v l d - - n l
d4c2mb-(8)
d4g7hc-(1)
d4g7hd-(3) k e v r k v r i a l a s p e k I r s w S y g e V e k p e t i n y r - t
60 70 80 90 100
d1twfa-(47) r a k i - g G L n d p - r L g s i d - - - - - - - - - - - - - r n - - l k c q t c q - - - e g m n e c
d1twfb-(18)
d4c2ma-(42) g h P v s g G L Y d l - a L G A F l - - - - - - - - - - - - - r n - - l - Ç s t ç g - - - l d e k f C
d4c2mb-(8)
d4g7hc-(1)
d4g7hd-(37) l k P e r d G L F D e r I F G P i k d y e C a c g k y k r q r f e g k v C e r c g V e V t k s i v r
110 120 130 140 150
d1twfa-(78) p G h f G h I d L a k p V F h V g F I a - - - - k I k k V C e C V C M h c G k l L L d e h n e l M r
d1twfb-(18)
d4c2ma-(73) p G h q G h I e L p v p C Y n P l F F n - - - - q L y i Y L r A S C l f c h h F r L k s v - e V h r
d4c2mb-(8)
d4g7hc-(1)
d4g7hd-(87) r y r m G h I e L a t p A A h I w F V k d v p s k I G t L L d L s - - - - - - - - - - - - - - - - -
160 170 180 190 200
d1twfa-(124) q A l a i k d s k k r F a a I w t l C k t k m v C e t d v p s e d d p t - - - - - - - - - - - - - -
d1twfb-(18)
d4c2ma-(118) Y A c k L r L L Q Y G L i d e S y k L d e i t l s s t - - l l n e l k s k r s e y V d m A I a k A l
d4c2mb-(8)
d4g7hc-(1)
d4g7hd-(120) - - - - - - - - - a t e L e q V L Y F s k y I V L d p k -


210 220 230 240 250
d1twfa-(160) - - -


410 420 430 440 450
d1twfa-(193) - - -



610 620 630 640 650

d1twfa-(251) s f *n* e *s* q r *g* ẽ **d** d L T f k L a d I L k A **Ñ** i s L ẽ t l ẽ h n - - - - - - - *g* A p - - - - - - - h

d1twfb-(18)

d4c2ma(-372) k l *g* e - e v h ẽ **n** s q Ñ q̃ L L s k V L t t̃ S l l i r d l n d̃ d l s k̃ l q̃ k d̃ k V **s** l e **d** r r v i f

d4c2mb(- 8)

d4g7hc(- 1)

d4g7hd(- 529) q v d g *g* r f a t̃ s **d̃** L Ñ d̃ L **Y** r̃ r L I n r **N** n r̃ L k k̃ l l a q̃ - - - - - - - *g* a p - - - - - - - e

660 670 680 690 700

d1twfa-(287) h a i e e a e s l L **q** f h V A T Y m̃ d̃ n d̃ i a *g* - - - - q p q a l *q* k s g - - *r* p v k **S** i r̃ a r l k

d1twfb-(18)

d4c2ma(-421) s r l m n a F v t I **Q̃ n** d̃ V Ñ a F i **D̃** s̃ t k a q̃ g r *t s* - - - - - - - - - *g k v* p i p G v k̃ **q̃** a l **ẽ**

d4c2mb(- 8)

d4g7hc(- 1)

d4g7hd(- 565) i i I r̃ ñ Ẽ k r̃ m L **Q̃** ẽ A V D̃ a L l d **N** *g* r r̃ *g* - - - - a p v t ñ p - - *g* **s** d r̃ p L r **S̃** l t̃ **d̃** i l s

710 720 730 740 750

d1twfa-(331) g k **ẽ** g r i r̃ g n l m̃ *g* k r v d *f* s a r̃ t v I s̃ g **d̃** p n L ẽ L d̃ **q** V G V P k s i A k t L T Ỹ p ẽ v V

d1twfb-(18)

d4c2ma(-462) k *k* e *g* l f r k h m m̃ g k r̃ v n *y* a a r̃ **s** v I s̃ p **d** p n I ẽ T̃ ñ **ẽ** I G V P p v f A v k l T **Ỹ** p ẽ p V

d4c2mb(- 8)

d4g7hc(- 1)

d4g7hd(- 609) *g* k q G r̃ f r q ñ l l g k r v d *y* s g r s v I v v G p q̃ L k L h **q** C G L P k̃ r m A l ẽ L - - - - - F

760 770 780 790 800

d1twfa-(381) **t̃** p y **ñ** i d r̃ L t q̃ L V r ñ *g* p n - - - - - - ẽ h p G A k y V i r d s̃ *g* d̃ r̃ i **d̃** L r̃ y **s** k - - - - -

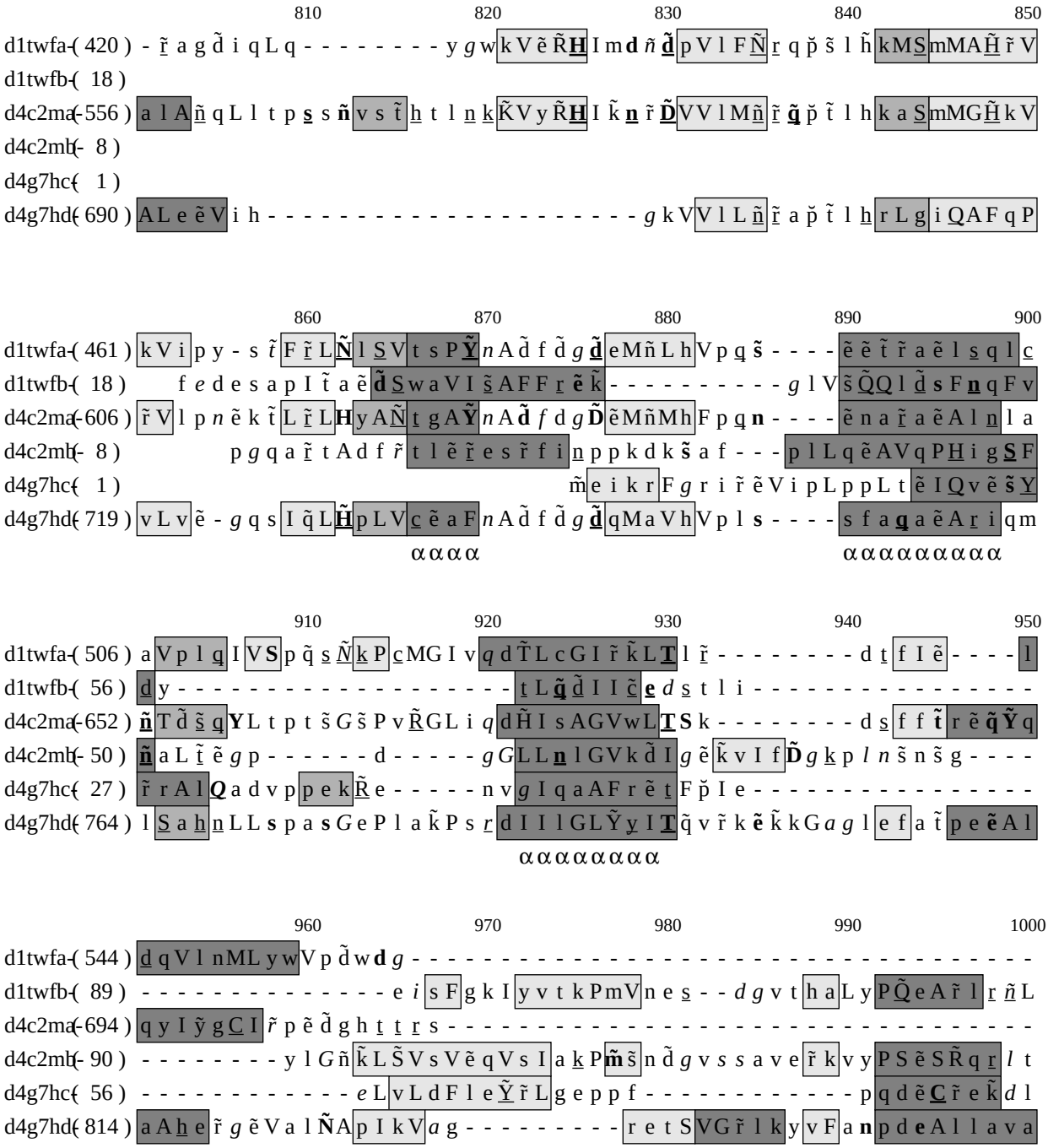
d1twfb-(18)

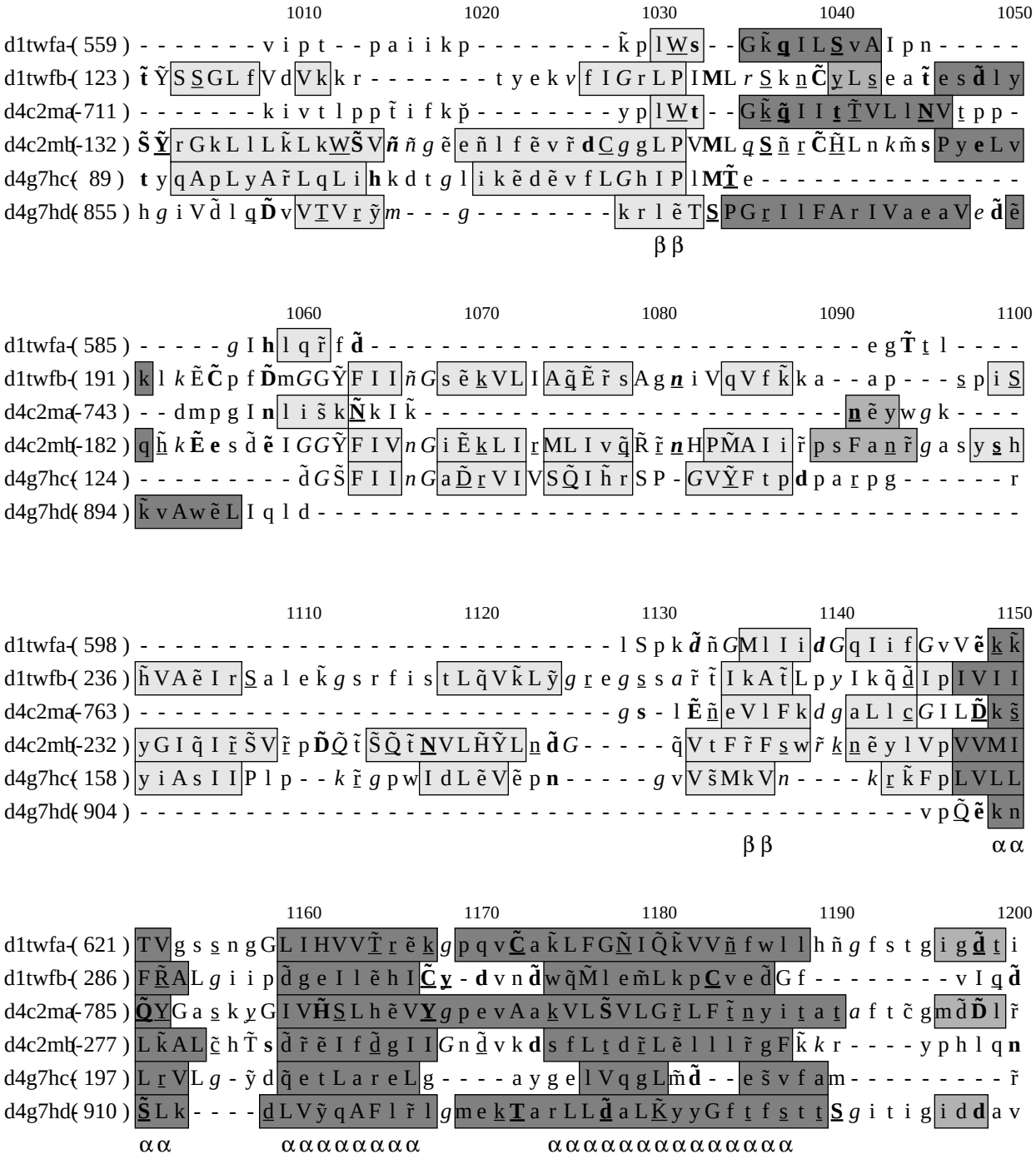
d4c2ma(-512) **t̃** a y **ñ** i a ẽ L r̃ q a V i n *G* p d - - - - - - k w p̆ G A t q I q̃ n e **d̃** *g* s̃ l v **s** L i g m **s̃** v e **q̃** r k

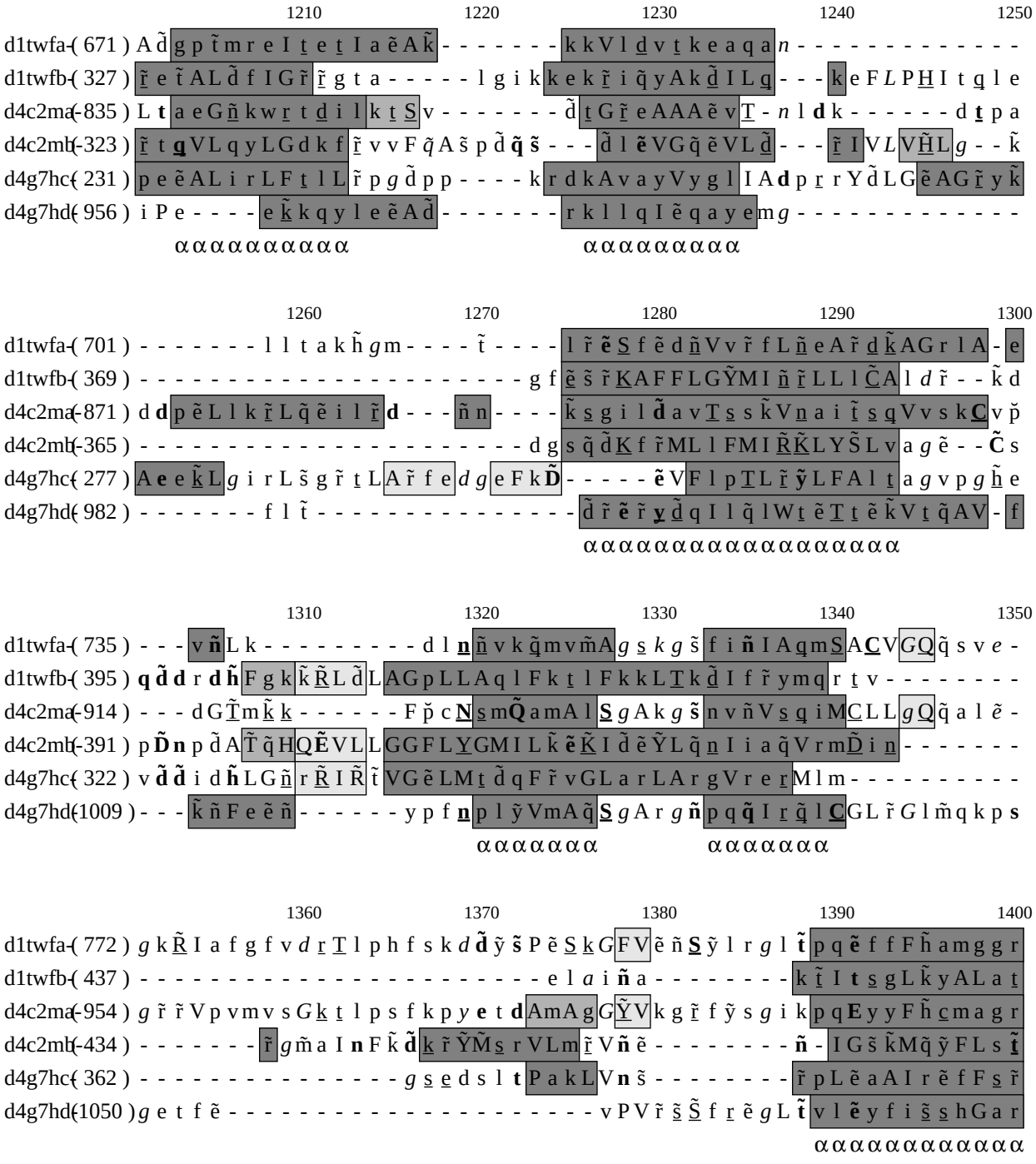
d4c2mb(- 8)

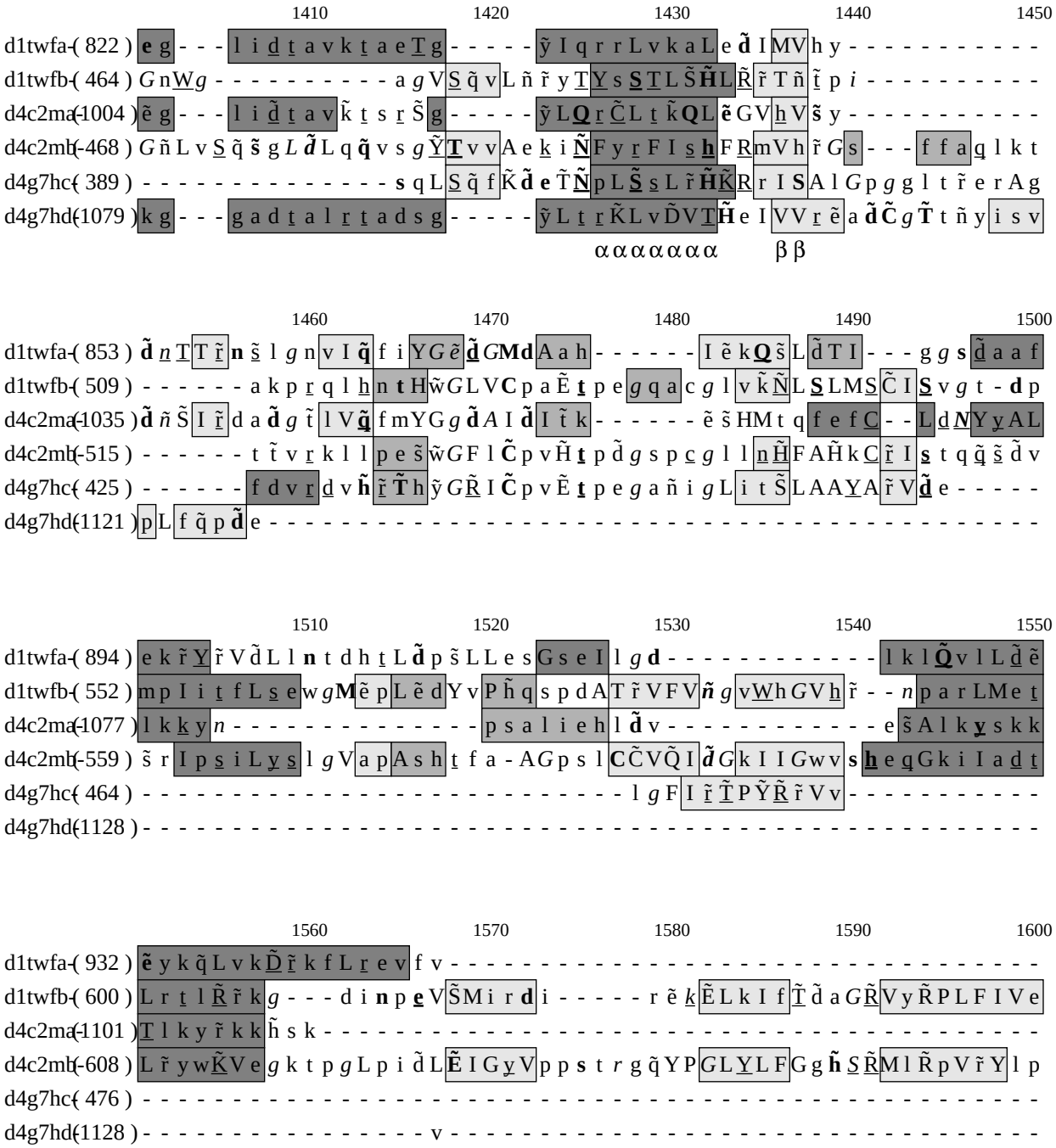
d4g7hc(- 1)

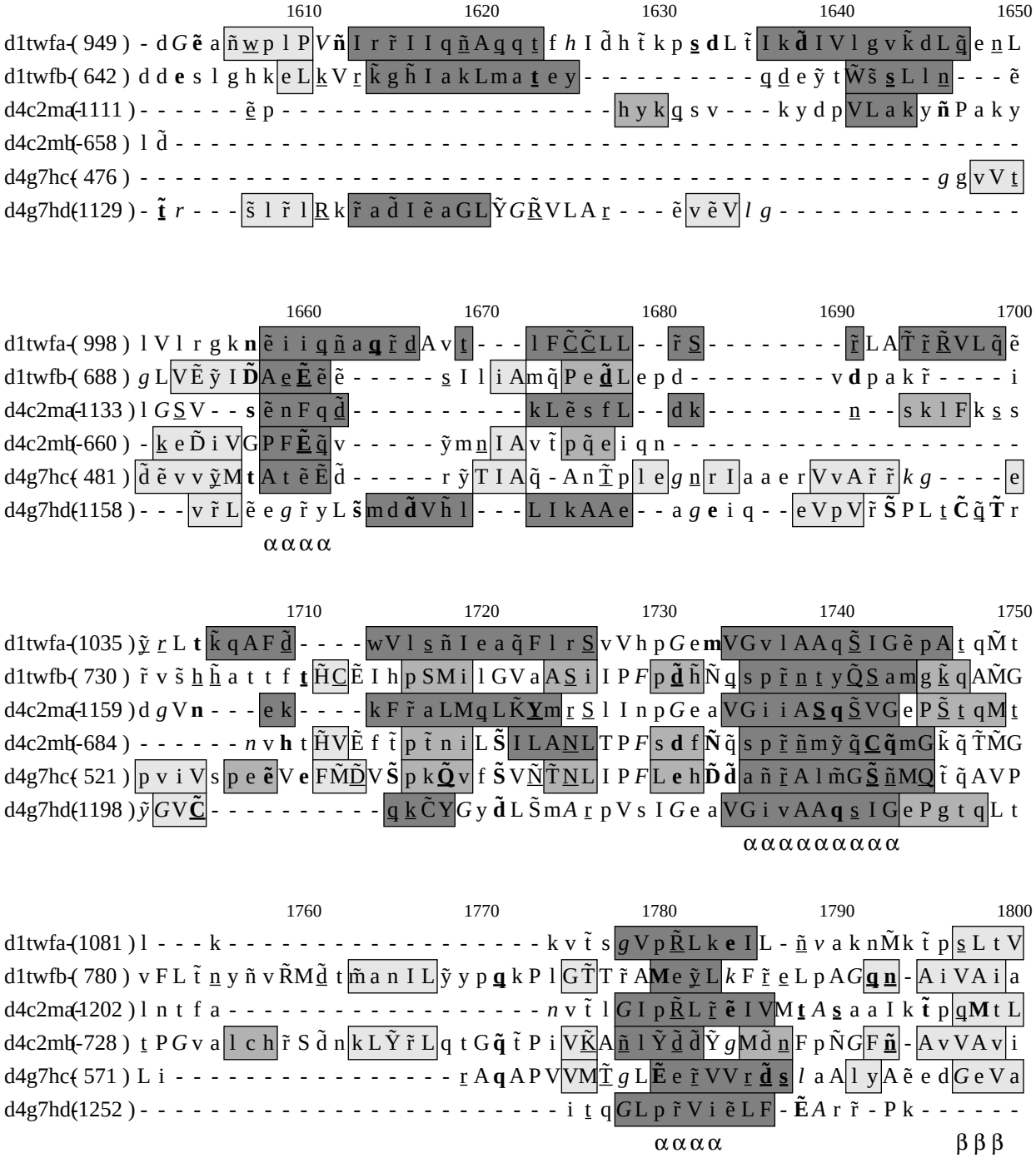
d4g7hd(- 654) k̃ p f L L k k M e e - k̃ g i A p **n** v k a A r r m L e - - - - - - - - - - - - - r̃ q r d̃ I k d e V w d

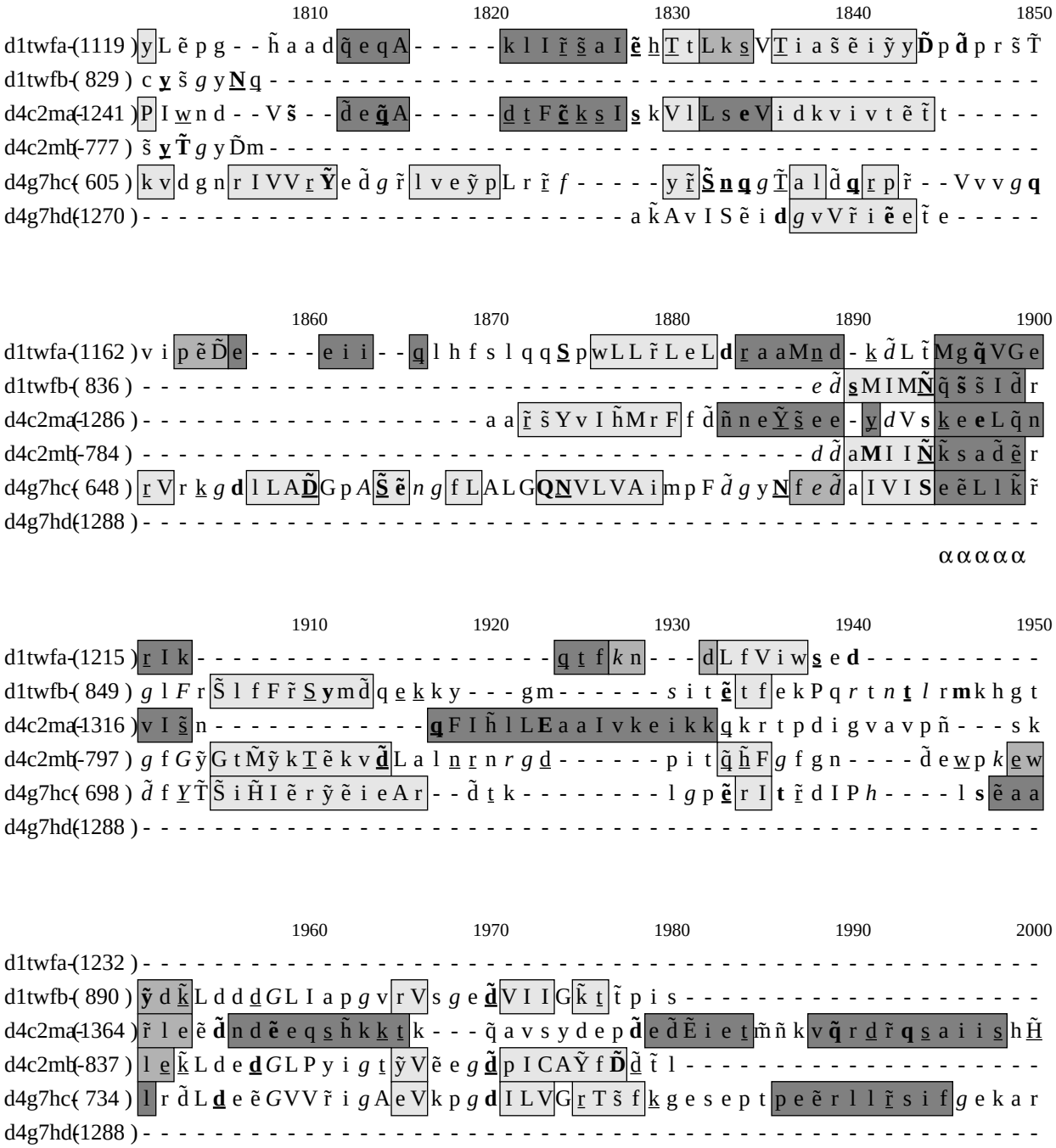

810
820
830
840
850
d1twfa-(420)
d1twfb-(18)
d4c2ma-(556)
d4c2mb-(8)
d4g7hc-(1)
d4g7hd-(690)
860
870
880
890
900
d1twfa-(461)
d1twfb-(18)
d4c2ma-(606)
d4c2mb-(8)
d4g7hc-(1)
d4g7hd-(719)
αααα
αααααααααα
910
920
930
940
950
d1twfa-(506)
d1twfb-(56)
d4c2ma-(652)
d4c2mb-(50)
d4g7hc-(27)
d4g7hd-(764)
αααααααααα
960
970
980
990
1000
d1twfa-(544)
d1twfb-(89)
d4c2ma-(694)
d4c2mb-(90)
d4g7hc-(56)
d4g7hd-(814)

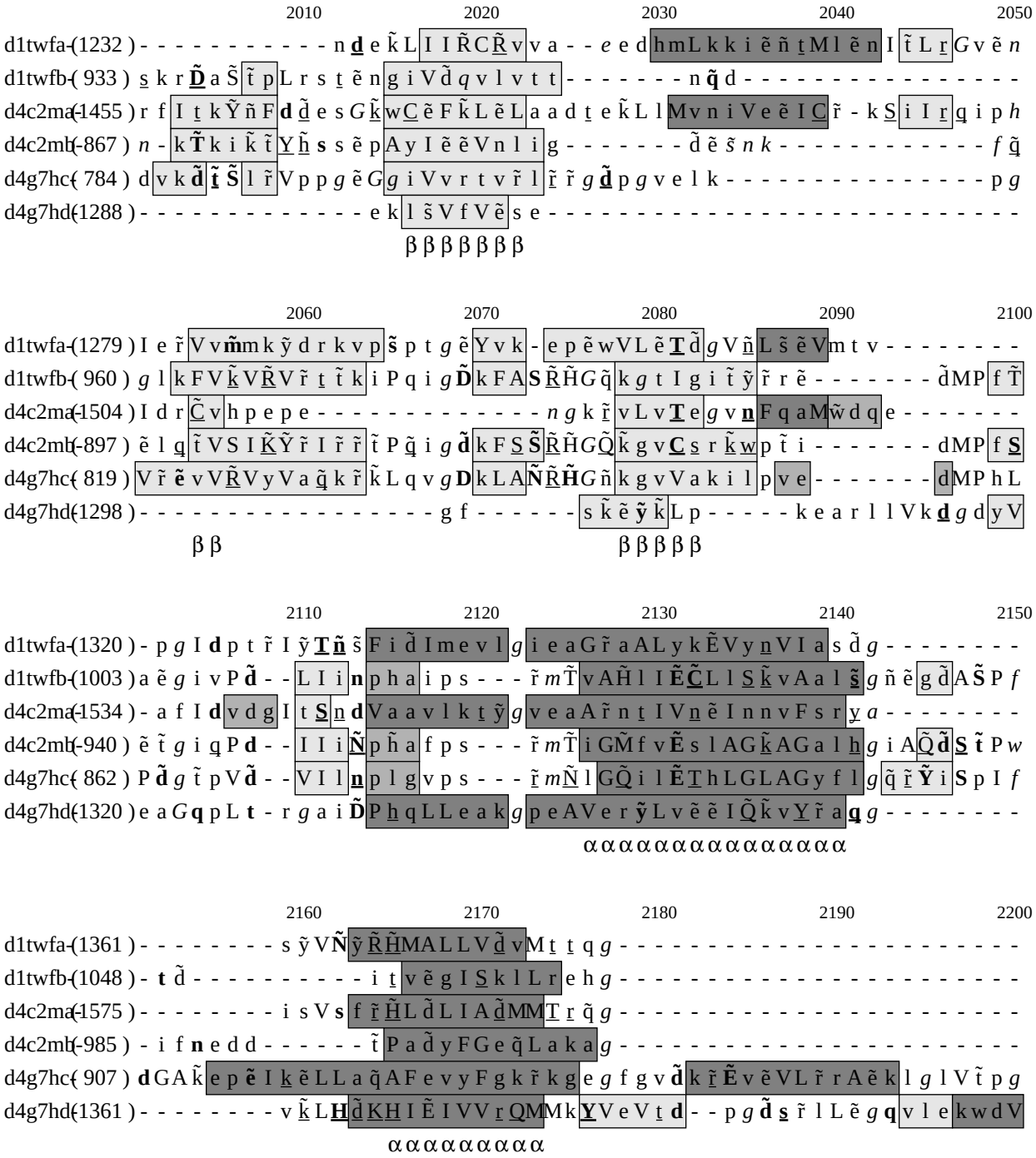

1010
1020
1030
1040
1050
d1twfa-(559)
d1twfb-(123)
d4c2ma-(711)
d4c2mb-(132)
d4g7hc-(89)
d4g7hd-(855)
β β
1060
1070
1080
1090
1100
d1twfa-(585)
d1twfb-(191)
d4c2ma-(743)
d4c2mb-(182)
d4g7hc-(124)
d4g7hd-(894)
1110
1120
1130
1140
1150
d1twfa-(598)
d1twfb-(236)
d4c2ma-(763)
d4c2mb-(232)
d4g7hc-(158)
d4g7hd-(904)
β β
α α
1160
1170
1180
1190
1200
d1twfa-(621)
d1twfb-(286)
d4c2ma-(785)
d4c2mb-(277)
d4g7hc-(197)
d4g7hd-(910)
α α
α α α α α α α α α
α α α α α α α α α α α α α α

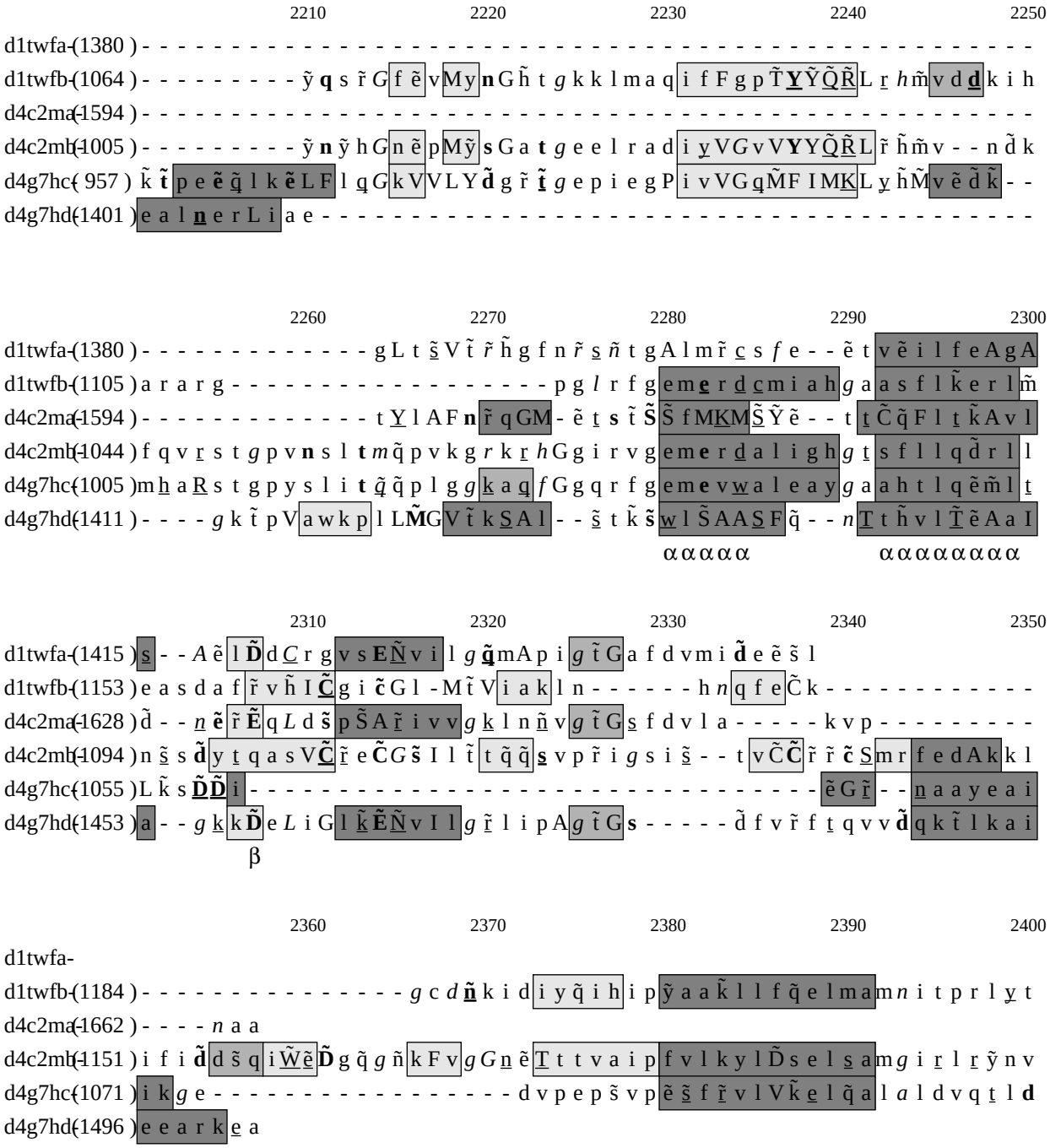

1210
1220
1230
1240
1250
d1twfa-(671) A d g p t m r e I t e t I a e A k - - - - - - - k k V l d v t k e a q a n - - - - - - - - - - - - -
d1twfb-(327) r e t A L d f I G r r g t a - - - - - l g i k k e k r i q y A k d I L q - - - k e F L P H I t q l e
d4c2ma-(835) L t a e G n k w r t d i l k t S v - - - - - - - d t G r e A A A e v T - n l d k - - - - - - d t p a
d4c2mb-(323) r t q V L q y L G d k f r v v F q A s p d q s - - - d l e V G q e V L d - - - r I V L V H L g - - k
d4g7hc-(231) p e e A L i r L F t l L r p g d p p - - - - k r d k A v a y V y g l I A d p r r Y d L G e A G r y k
d4g7hd-(956) i P e - - - - - e k k q y l e e A d - - - - - - - r k l l q I e q a y e m g - - - - - - - - - - - -
α α α α α α α α α α α α α α α α α α α α α α
1260
1270
1280
1290
1300
d1twfa-(701) - - - - - - - l l t a k h g m - - - - t - - - - l r e S f e d n V v r f L n e A r d k A G r l A - e
d1twfb-(369) - g f e s r K A F F L G Y M I n r L L l C A l d r - - k d
d4c2ma-(871) d d p e L l k r L q e i l r d - - - n n - - - - k s g i l d a v T s s k V n a i t s q V v s k C v p
d4c2mb-(365) - d g s q d K f r M L l F M I R K L Y S L v a g e - - C s
d4g7hc-(277) A e e k L g i r L s g r t L A r f e d g e F k D - - - - - e V F l p T L r y L F A l t a g v p g h e
d4g7hd-(982) - - - - - - - f l t - - - - - - - - - - - - - - - - d r e r y d q I l q l W t e T t e k V t q A V - f
α α α α α α α α α α α α α α α α α α α α α α
1310
1320
1330
1340
1350
d1twfa-(735) - - - v n L k - - - - - - - - - d l n n v k q m v m A g s k g s f i n I A q m S A C V G Q q s v e -
d1twfb-(395) q d d r d h F g k k R L d L A G p L L A q l F k t l F k k L T k d I f r y m q r t v - - - - - - - -
d4c2ma-(914) - - - d G T m k k - - - - - - F p c N s m Q a m A l S g A k g s n v n V s q i M C L L g Q q a l e -
d4c2mb-(391) p D n p d A T q H Q E V L L G G F L Y G M I L k e K I d e Y L q n I i a q V r m D i n - - - - - - -
d4g7hc-(322) v d d i d h L G n r R I R t V G e L M t d q F r v G L a r L A r g V r e r M l m - - - - - - - - -
d4g7hd-(1009) - - - k n F e e n - - - - - - y p f n p l y V m A q S g A r g n p q q I r q l C G L r G l m q k p s
α α α α α α α α α α α α α α α α
1360
1370
1380
1390
1400
d1twfa-(772) g k R I a f g f v d r T l p h f s k d d y s P e S k G F V e n S y l r g l t p q e f f F h a m g g r
d1twfb-(437) - e l a i n a - - - - - - - - k t I t s g L k y A L a t
d4c2ma-(954) g r r V p v m v s G k t l p s f k p y e t d A m A g G Y V k g r f y s g i k p q E y y F h c m a g r
d4c2mb-(434) - - - - - - - r g m a I n F k d k r Y M s r V L m r V n e - - - - - - - - n - I G s k M q y F L s t
d4g7hc-(362) - - - - - - - - - - - - - - - - g s e d s l t P a k L V n s - - - - - - - - r p L e a A I r e f F s r
d4g7hd-(1050) g e t f e - v P V r s S f r e g L t v l e y f i s s h G a r
α α α α α α α α α α α α α α α α


1410
1420
1430
1440
1450
d1twfa-(822)
d1twfb-(464)
d4c2ma-(1004)
d4c2mb-(-468)
d4g7hc-(389)
d4g7hd-(1079)
αααααααα
ββ
1460
1470
1480
1490
1500
d1twfa-(853)
d1twfb-(509)
d4c2ma-(1035)
d4c2mb-(-515)
d4g7hc-(425)
d4g7hd-(1121)
1510
1520
1530
1540
1550
d1twfa-(894)
d1twfb-(552)
d4c2ma-(1077)
d4c2mb-(-559)
d4g7hc-(464)
d4g7hd-(1128)
1560
1570
1580
1590
1600
d1twfa-(932)
d1twfb-(600)
d4c2ma-(1101)
d4c2mb-(-608)
d4g7hc-(476)
d4g7hd-(1128)


1610
1620
1630
1640
1650
d1twfa-(949)
d1twfb-(642)
d4c2ma-(1111)
d4c2mb-(658)
d4g7hc-(476)
d4g7hd-(1129)
1660
1670
1680
1690
1700
d1twfa-(998)
d1twfb-(688)
d4c2ma-(1133)
d4c2mb-(660)
d4g7hc-(481)
d4g7hd-(1158)
αααα
1710
1720
1730
1740
1750
d1twfa-(1035)
d1twfb-(730)
d4c2ma-(1159)
d4c2mb-(684)
d4g7hc-(521)
d4g7hd-(1198)
αααααααααα
1760
1770
1780
1790
1800
d1twfa-(1081)
d1twfb-(780)
d4c2ma-(1202)
d4c2mb-(728)
d4g7hc-(571)
d4g7hd-(1252)
αααα
βββ


1810 1820 1830 1840 1850
d1twfa-(1119)
d1twfb-(829)
d4c2ma-(1241)
d4c2mb-(-777)
d4g7hc-(605)
d4g7hd-(1270)
1860 1870 1880 1890 1900
d1twfa-(1162)
d1twfb-(836)
d4c2ma-(1286)
d4c2mb-(-784)
d4g7hc-(648)
d4g7hd-(1288)
αααααα
1910 1920 1930 1940 1950
d1twfa-(1215)
d1twfb-(849)
d4c2ma-(1316)
d4c2mb-(-797)
d4g7hc-(698)
d4g7hd-(1288)
1960 1970 1980 1990 2000
d1twfa-(1232)
d1twfb-(890)
d4c2ma-(1364)
d4c2mb-(-837)
d4g7hc-(734)
d4g7hd-(1288)


2010
2020
2030
2040
2050
d1twfa-(1232)
d1twfb-(933)
d4c2ma-(1455)
d4c2mb-(-867)
d4g7hc-(784)
d4g7hd-(1288)
β β β β β β β
2060
2070
2080
2090
2100
d1twfa-(1279)
d1twfb-(960)
d4c2ma-(1504)
d4c2mb-(-897)
d4g7hc-(819)
d4g7hd-(1298)
β β
β β β β β
2110
2120
2130
2140
2150
d1twfa-(1320)
d1twfb-(1003)
d4c2ma-(1534)
d4c2mb-(-940)
d4g7hc-(862)
d4g7hd-(1320)
α α α α α α α α α α α α α α α
2160
2170
2180
2190
2200
d1twfa-(1361)
d1twfb-(1048)
d4c2ma-(1575)
d4c2mb-(-985)
d4g7hc-(907)
d4g7hd-(1361)
α α α α α α α α α


2210
2220
2230
2240
2250
d1twfa-(1380)
d1twfb-(1064)
d4c2ma-(1594)
d4c2mb-(1005)
d4g7hc-(957)
d4g7hd-(1401)
2260
2270
2280
2290
2300
d1twfa-(1380)
d1twfb-(1105)
d4c2ma-(1594)
d4c2mb-(1044)
d4g7hc-(1005)
d4g7hd-(1411)
αααααα
αααααααααα
2310
2320
2330
2340
2350
d1twfa-(1415)
d1twfb-(1153)
d4c2ma-(1628)
d4c2mb-(1094)
d4g7hc-(1055)
d4g7hd-(1453)
β
2360
2370
2380
2390
2400
d1twfa-
d1twfb-(1184)
d4c2ma-(1662)
d4c2mb-(1151)
d4g7hc-(1071)
d4g7hd-(1496)

d1twfa-
d1twfb-(1219) d r s r d f
d4c2ma-
d4c2mb-(1201) e p̌ k
d4g7hc-(1104) - - e k *d* n p v **d** i f *e g* l a s k
d4g7hd-