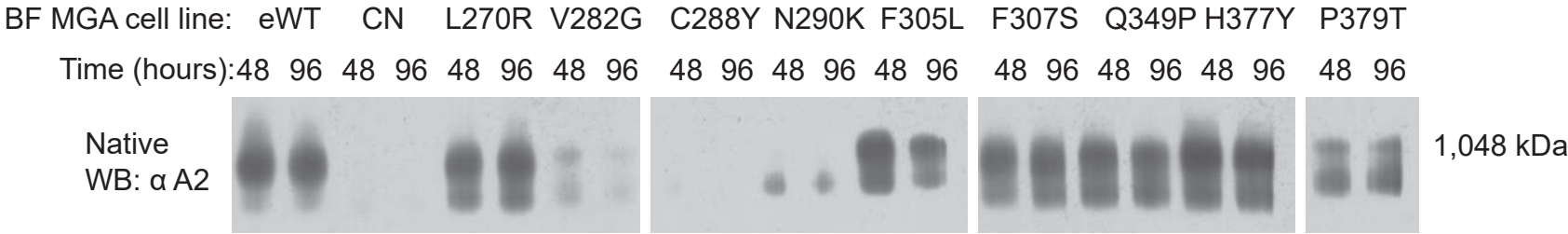


Fig. S1

Consensus	1 10 20 30 40 50 60	M X R V X S H X S R R X X X L X X R G X X X Y A S P X X X S X R Y Y X X T X X L L A P K T D T P S F Q C G E C G K A F R L I N A L N H H
1. T. brucei		M K R V T S H I S R F L P L V L S Q R G L S T Y A S P H V S S M R Y Y G A T K C L L A S T P D T P S F Q C G E C G K A F R L I N A L N H H
2. T. congolense		M L C V S S L V L R R V R A P L L S R C R A A H T S S L F C L K R Y H A V T P R F L A P K T D A A S F Q C S E C G K A F R L I N A L N H H
3. T. cruzi		M R R I A S H L S Q R T Y R A L F P R G G G F Y A P P F N M S T R F Y R E T S L L Q A P K T E T P A Y Q C G E C G K T F R L L N A L N H H
Consensus	70 80 90 100 110 120 130	I M T K H A G K A K A M V N K X G K L E E V X P E E X K N K X S X A M X Q X T X X P X S T A T X G T E X A X X S P T X X X I P G M P F S P
1. T. brucei		I M T K H A G K A K A M M N K G G K L E E V N P E E I K N K P Q G A M S Q P T S P P P S S S T S G T E A A S T S P T H S S F P G I P F S P
2. T. congolense		I M T K H G G K A K A M V N R E G K L E E V A P D D V T N K Q S T D M L Q S Q R R P Q S T A N K G T E Y T A P S P T Q V N I P G M P F F P
3. T. cruzi		I M T K H A G H A K A M V L K A G K L E E V K P E E A K N K S S H A - T D A T H A A S T T A T G A T M S A T Q I P T - - G F P G M T Y S P
Consensus	140 150 160 163 172 182 192	X G G X X X X G S P X G A A S X X X X T T A A - - - - - X X S A X X N X V X D E D A D K K X F V C T I C Q K T F R L E A A L Q H H
1. T. brucei		V G G I G L V G T P X G A A S H V N T T T T A - - - - - A N S A S G N A L S D E N A D K K T F V C T I C Q K T F R L E A A L Q H H
2. T. congolense		M S S V N P I G S S S P A P Q S - - S P E T A A - - - - - S T A A G D N T V T D G D A D K K S F V C T I C Q K T F R L E A A L Q H H
3. T. cruzi		L G G T A A F G S P L G V A S M P L T S T A A A G A P T N A G K N A S G T E S S V A D E D A D K K L F V C T I C Q K T F R L E A A L Q H H
Consensus	202 212 220 230 240 250 260	Y Q A K H N M E M P T X S S S X G G - - A S S X P A X X X X S T X X G V X X X X F G H T X D X A X K S T X G X Q Y V H S Q E T V L P Q A P
1. T. brucei		Y Q A K H N M E M P T S S S S S G G - - A S A Q P V L Q G G A T T A G V G S V G F S H T E E E T G R S A M G T Q Y V H S Q E T I L P Q A P
2. T. congolense		Y Q A K H N M E M P T A S S G G G G A T A S R P A S V S T S S A S G V M G S A F G H T D D N A S K T T S G A Q Y I H S Q E T V L P Q A P
3. T. cruzi		Y Q A K H N M E M P T N S T S - - - - - A S S T R A A S Q S S T N L G A A N A I F G G A T D D A V K S T T G V H Y V H S Q E S V L P Q A P
Consensus	270 280 290 300 310 320 330	Q Y H L D V A P N A P E E G E V A A H W R C V N H C V X L G X V Q N I Q E G Y V F E E K V L Q F T L I T D F E G P S P G D P D K D F H T V
1. T. brucei		Q Y H L D V A P N A P E E G E V A A H W R C V N H C V M L G V V Q N I Q E G F V F E D K V L Q F T L I T D F E G P S P G D P D K D F H T V
2. T. congolense		Q Y H L D V A P N A P E E G E V A A H W R C V N H C V L M G T V Q N I Q E G Y V F E E K V L Q F T L I T D F E G P S P G D P D K D F H T V
3. T. cruzi		Q Y H L D V A P N A P E E G D V A A H W R C V N Y C V V L G P V Q N I Q E G Y V F E E K V V Q F T L I T D F E G P S P G D P D K D F H T V
Consensus	340 350 360 370 380 393	R V F D X X Y X S R V K E Q L K E G D X F L V T G R L R M V P Q Y D X S M R K Y Y H Y P V I Q V H P G C G S V L K V
1. T. brucei		R V F D S D Y S S R V K E Q L R D G E W F L V T G R L R M V P Q Y D G S M R K Y Y H Y P V I Q V H P G C G S V L K V
2. T. congolense		R V F D G E Y G S R V K E Q L K E G D H F L V T G R L R M V P Q Y D P S M R K Y Y H Y P V V Q V H P G S G S V L K V
3. T. cruzi		R I F D N S F C E Q M K K E L K E G D R F L V T G R L R M I P Q Y D S A M K K Y Y H Y P V I Q V H P G C G S V V K V

Figure S2

A.



B.

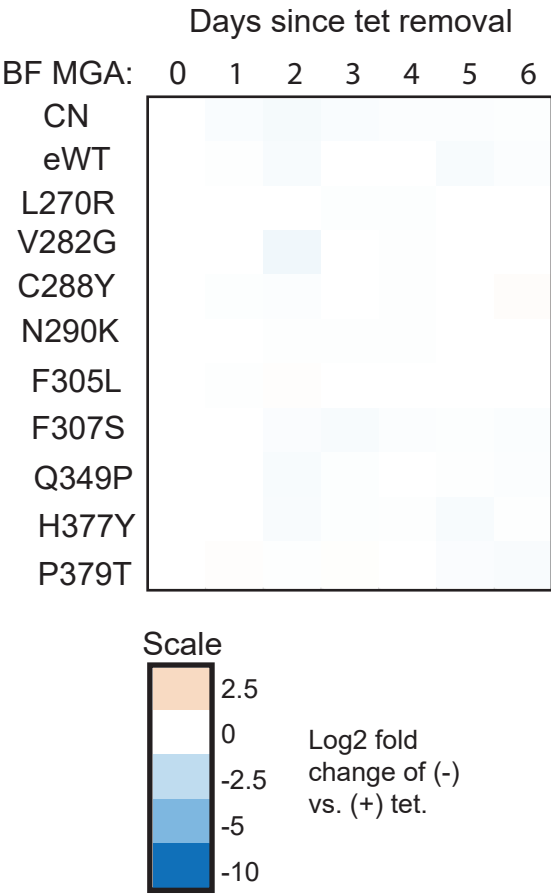


Figure S3



Figure S4A

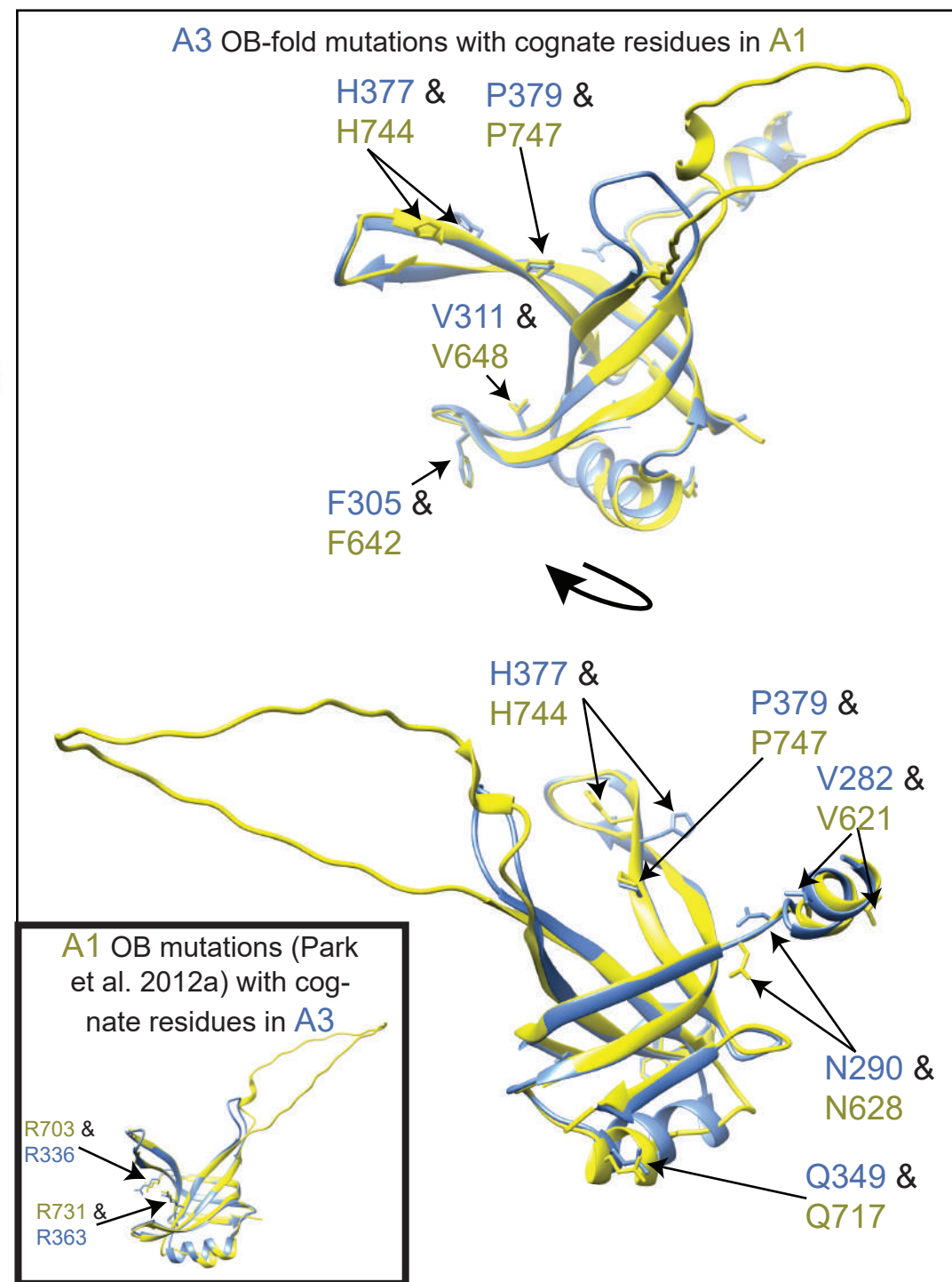
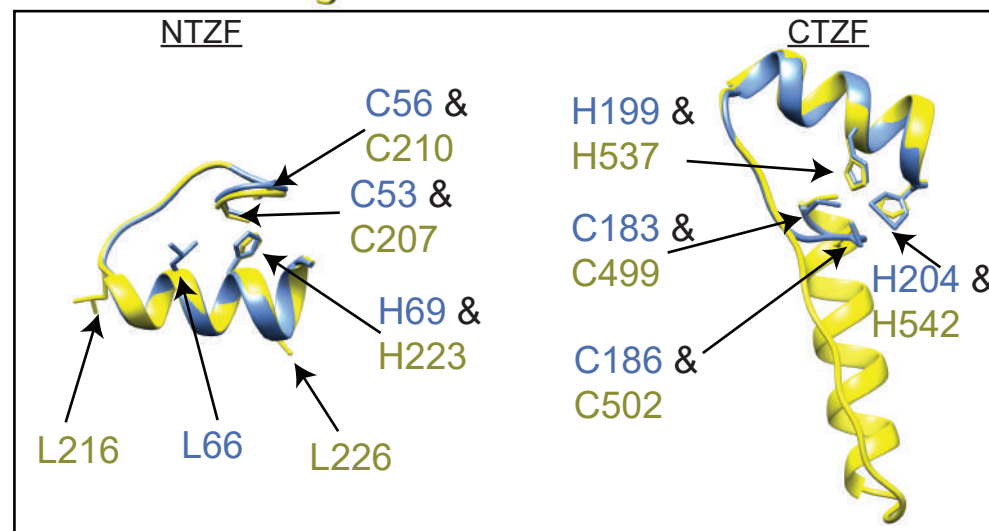
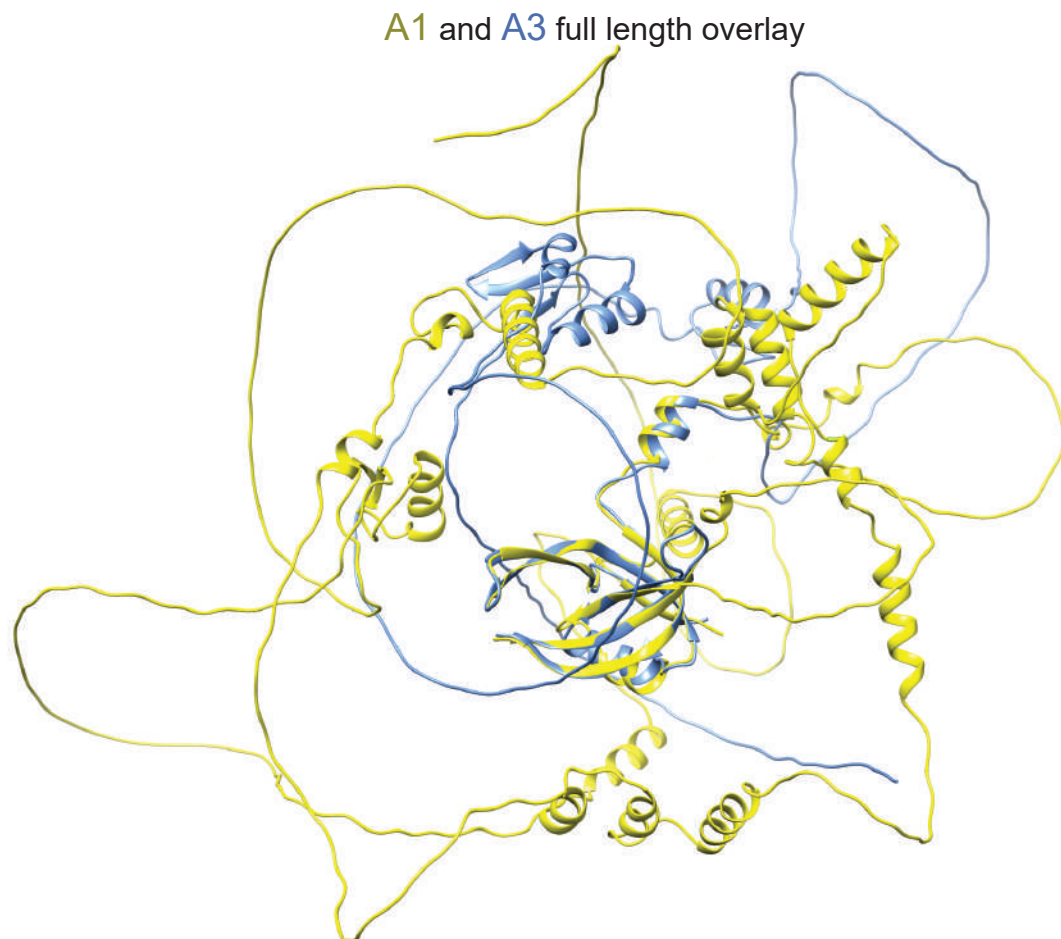
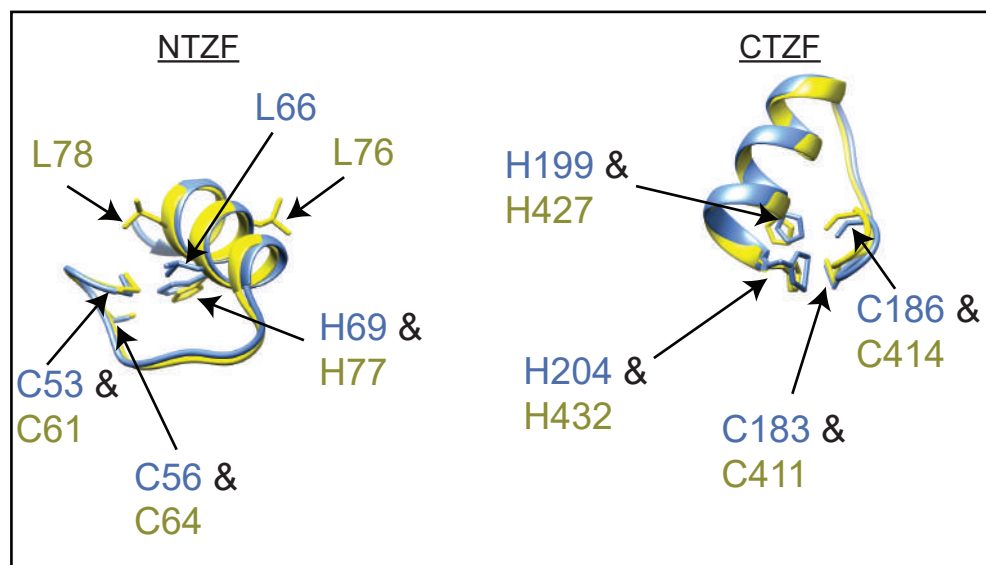
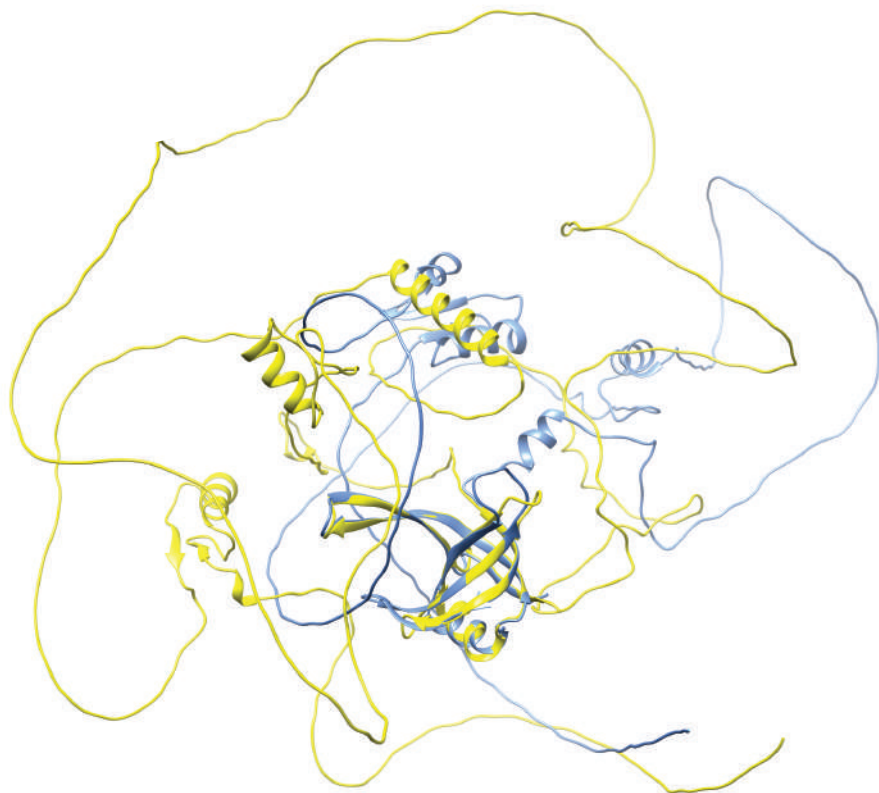


Figure S4B

A2 and A3 full length overlay

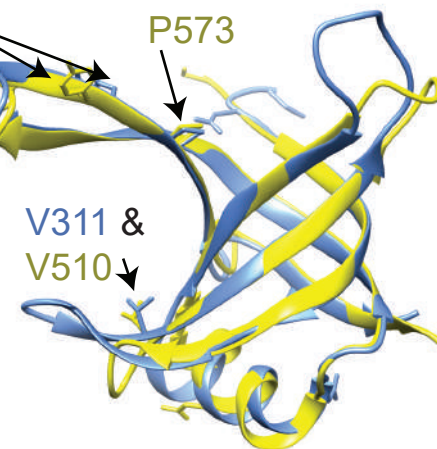


OB-fold

H377 &
Y569 &
Y570

P379 &
P573

V311 &
V510



H377 &
Y569 &
Y570

P379 &
P573

C288 &
C490

N290 &
N493

Q349 &
Q538

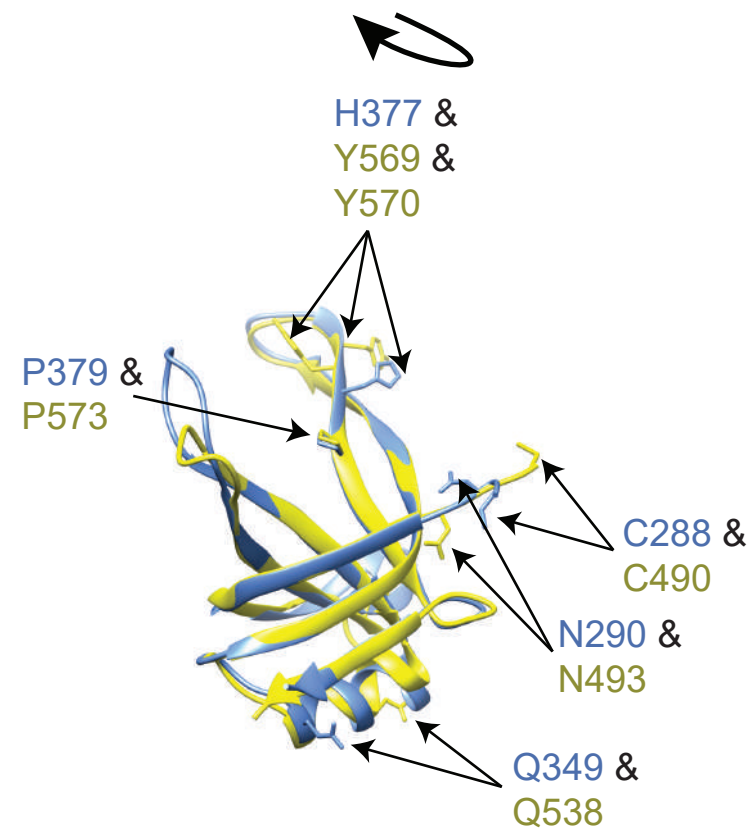


Figure S4C

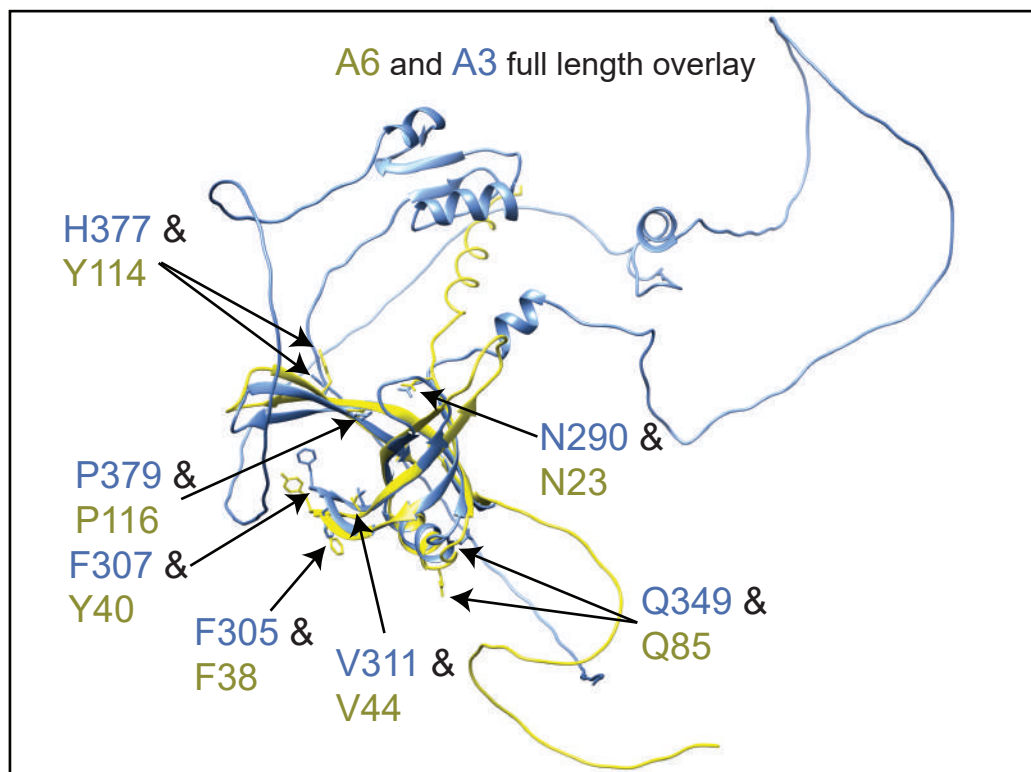
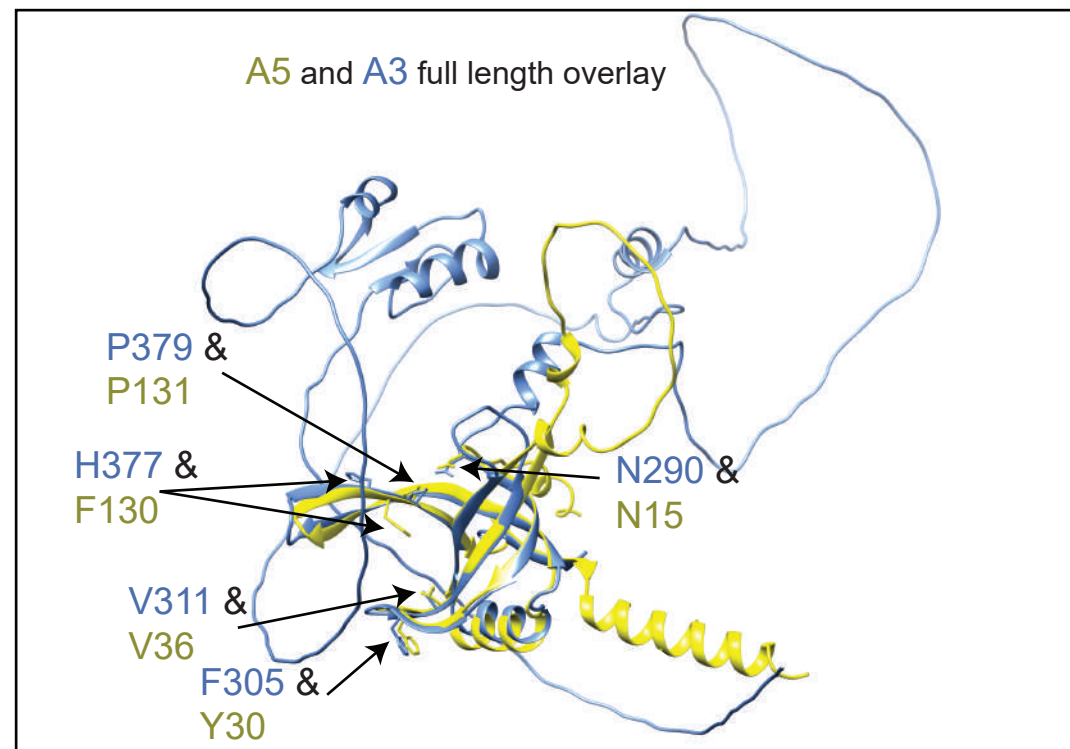
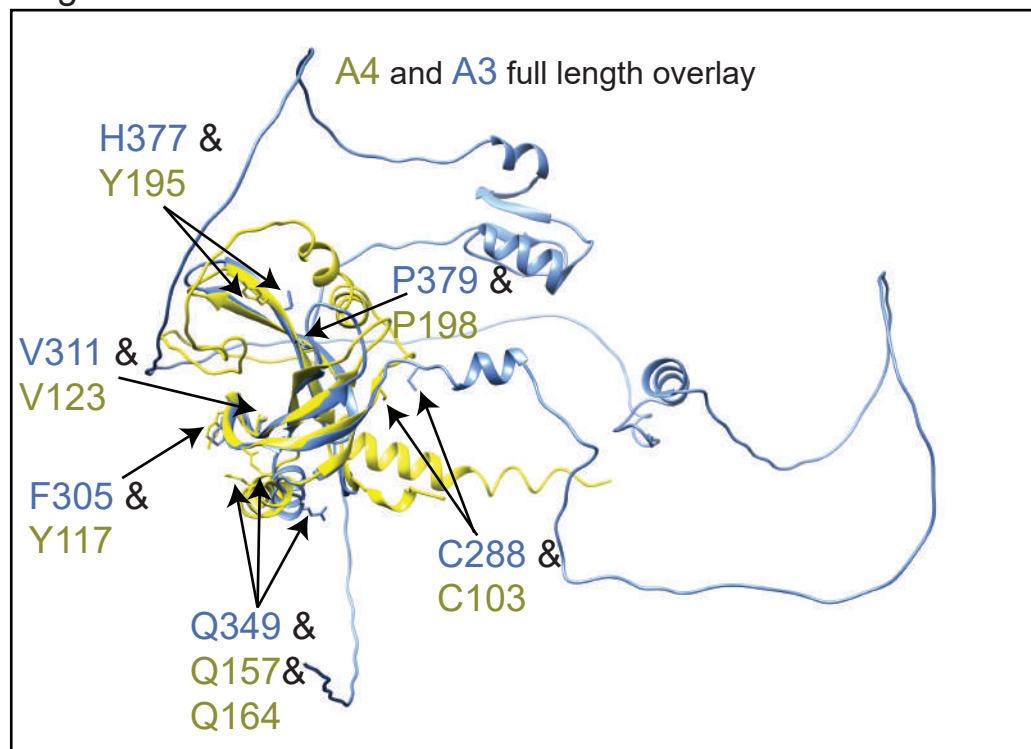


Figure S4D

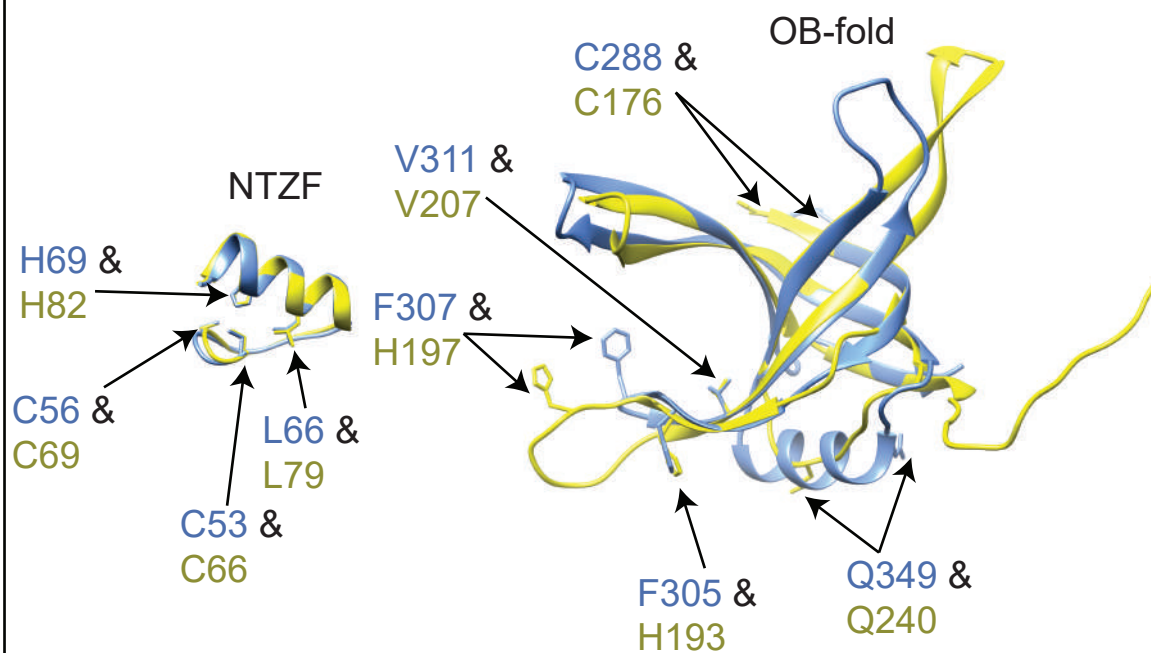
MPSS5 and A3 full length overlay



MPSS6 and A3 full length overlay



MPSS5 and A3



MPSS6 and A3

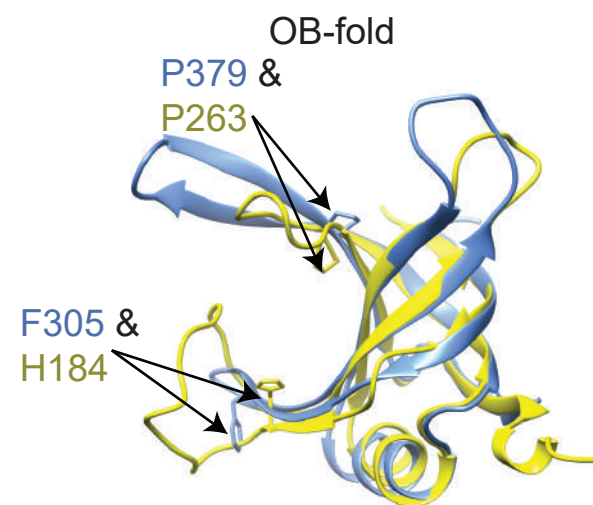


Figure S4E

Tb927.10.8220 and A3 full length overlay

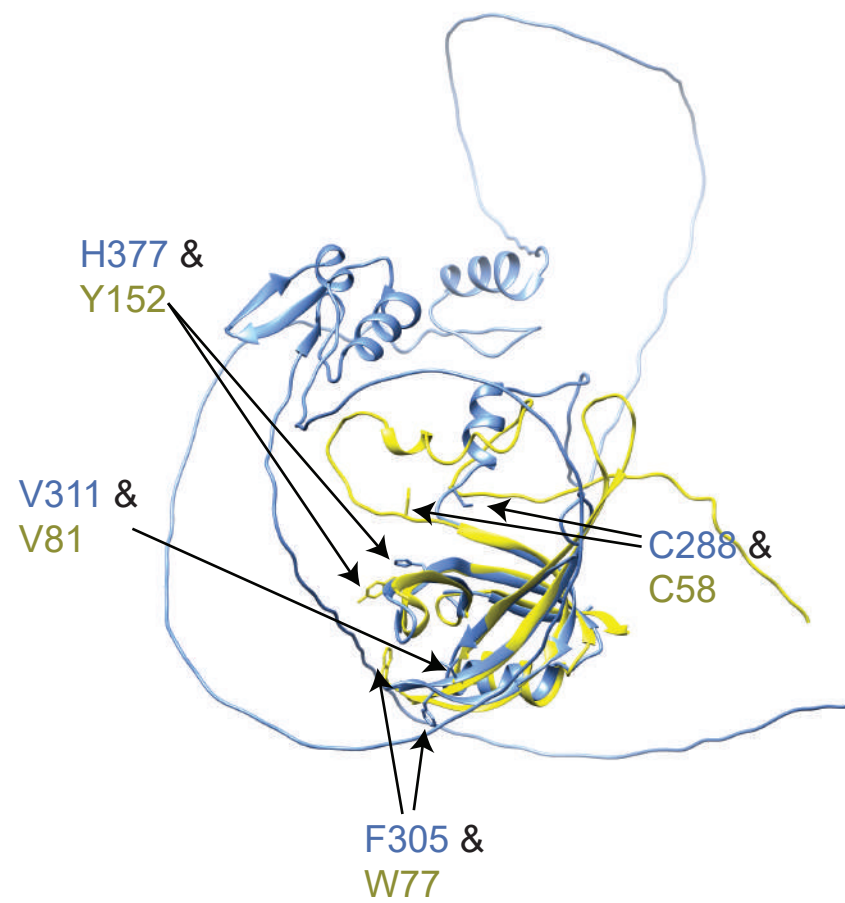
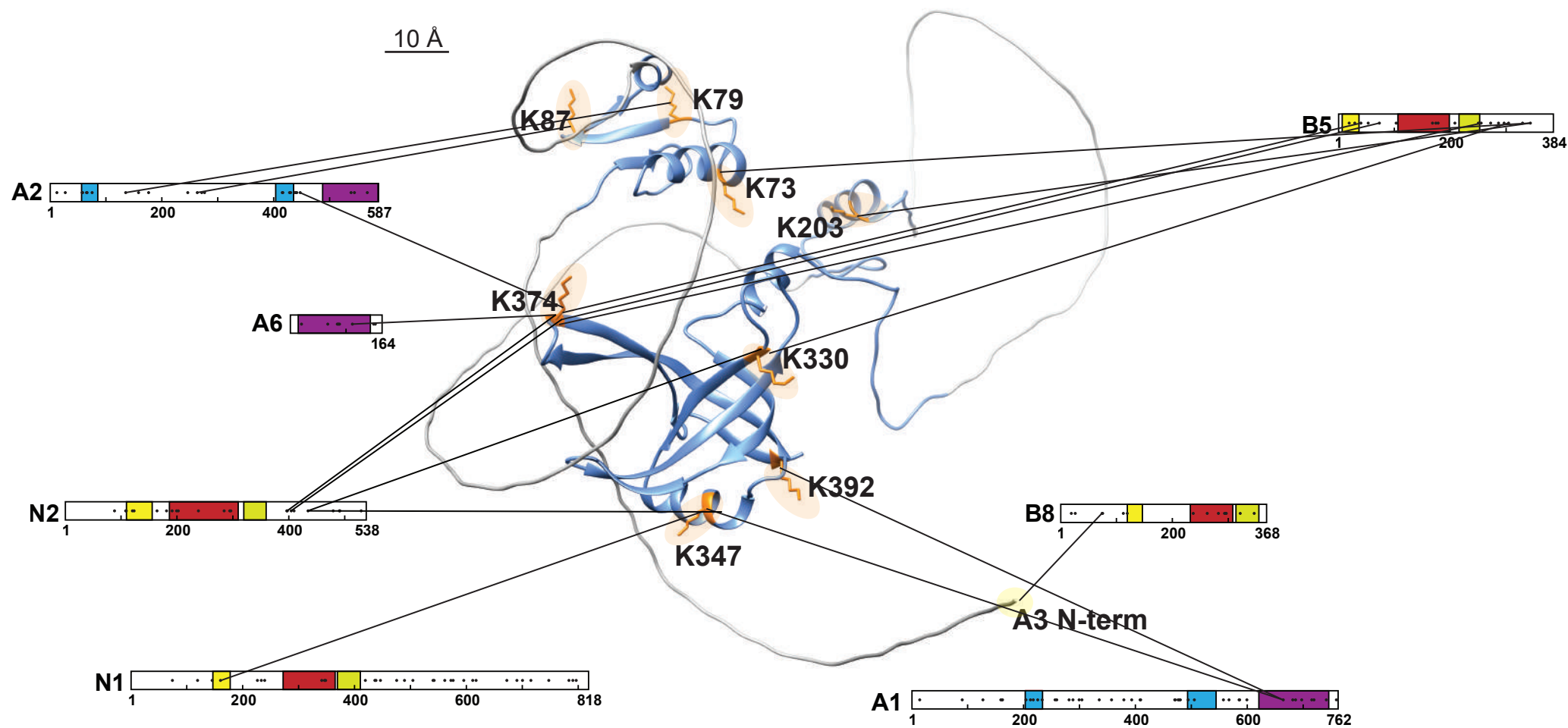


Figure S5A.



- Domain legend:
- OB-fold
 - C2H2 zinc finger
 - RNase III
 - RNase III Associated Motif (RAM)
 - U1-like C2H2 zinc finger

Figure S5B.

10 Å

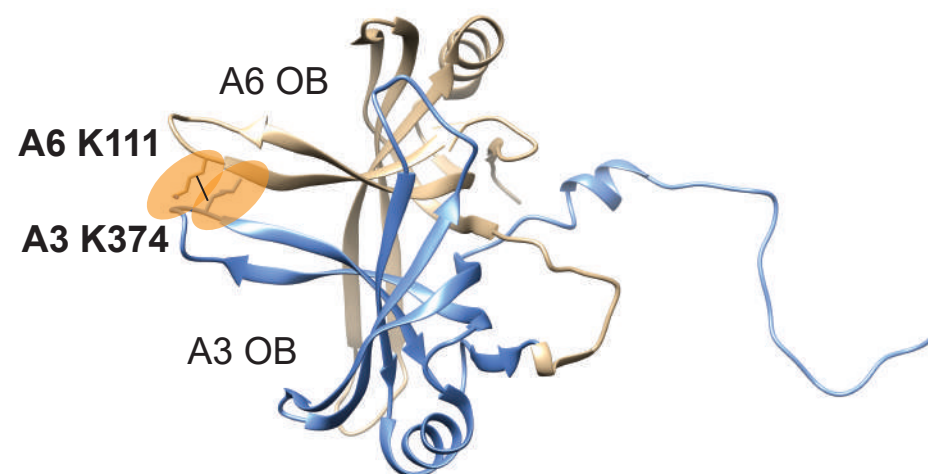


Figure S5C.

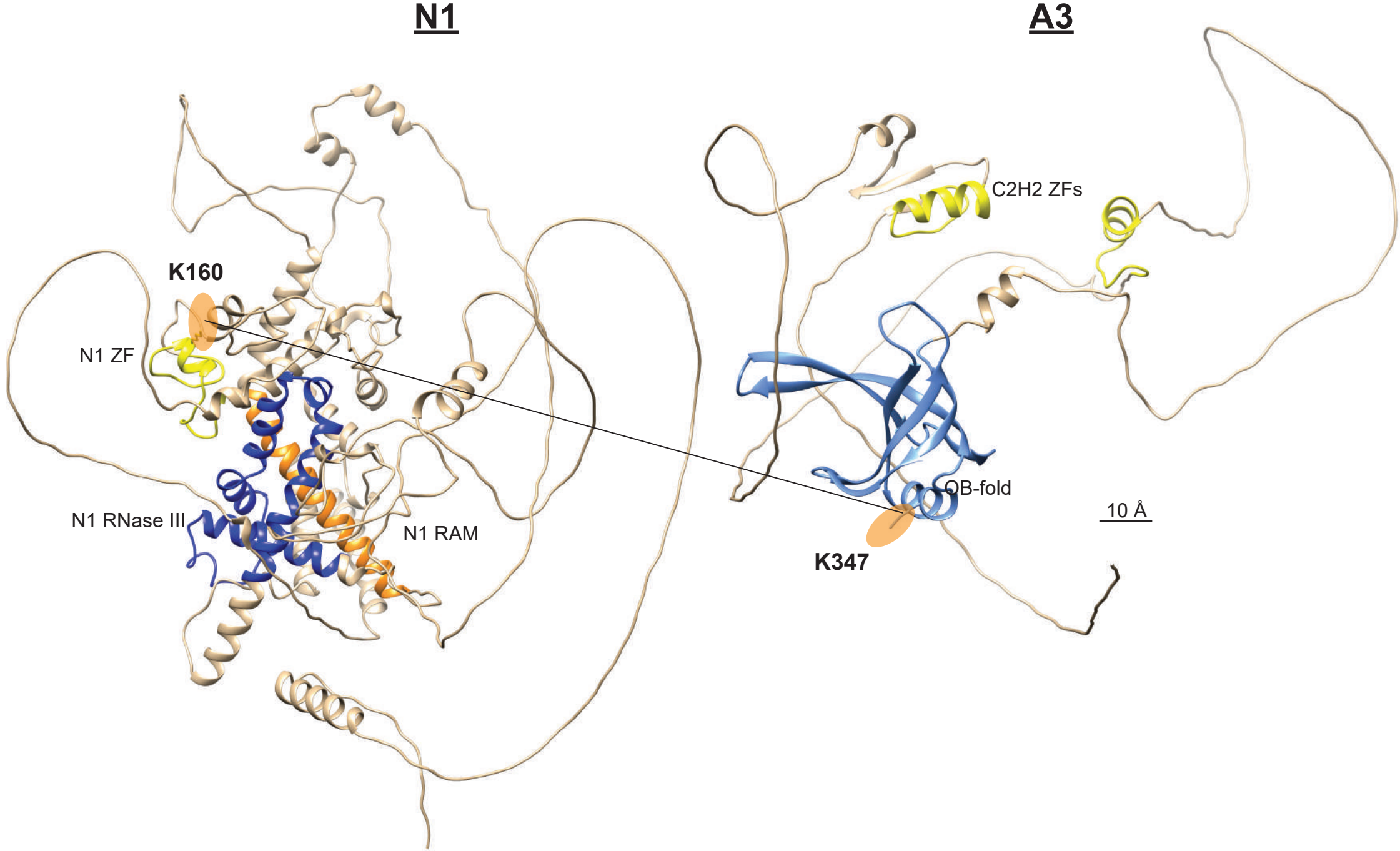


Figure S5D.

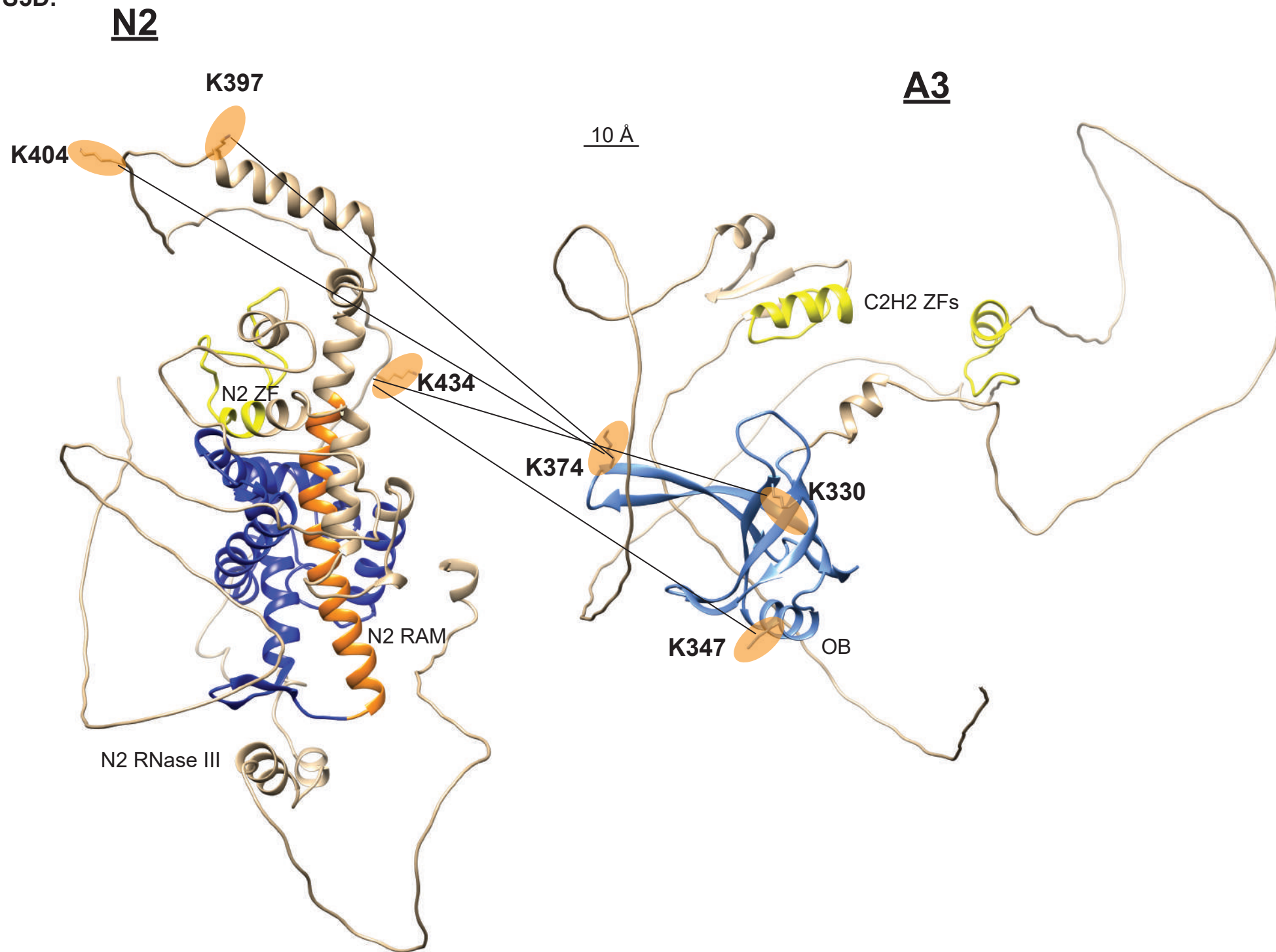


Figure S5E.

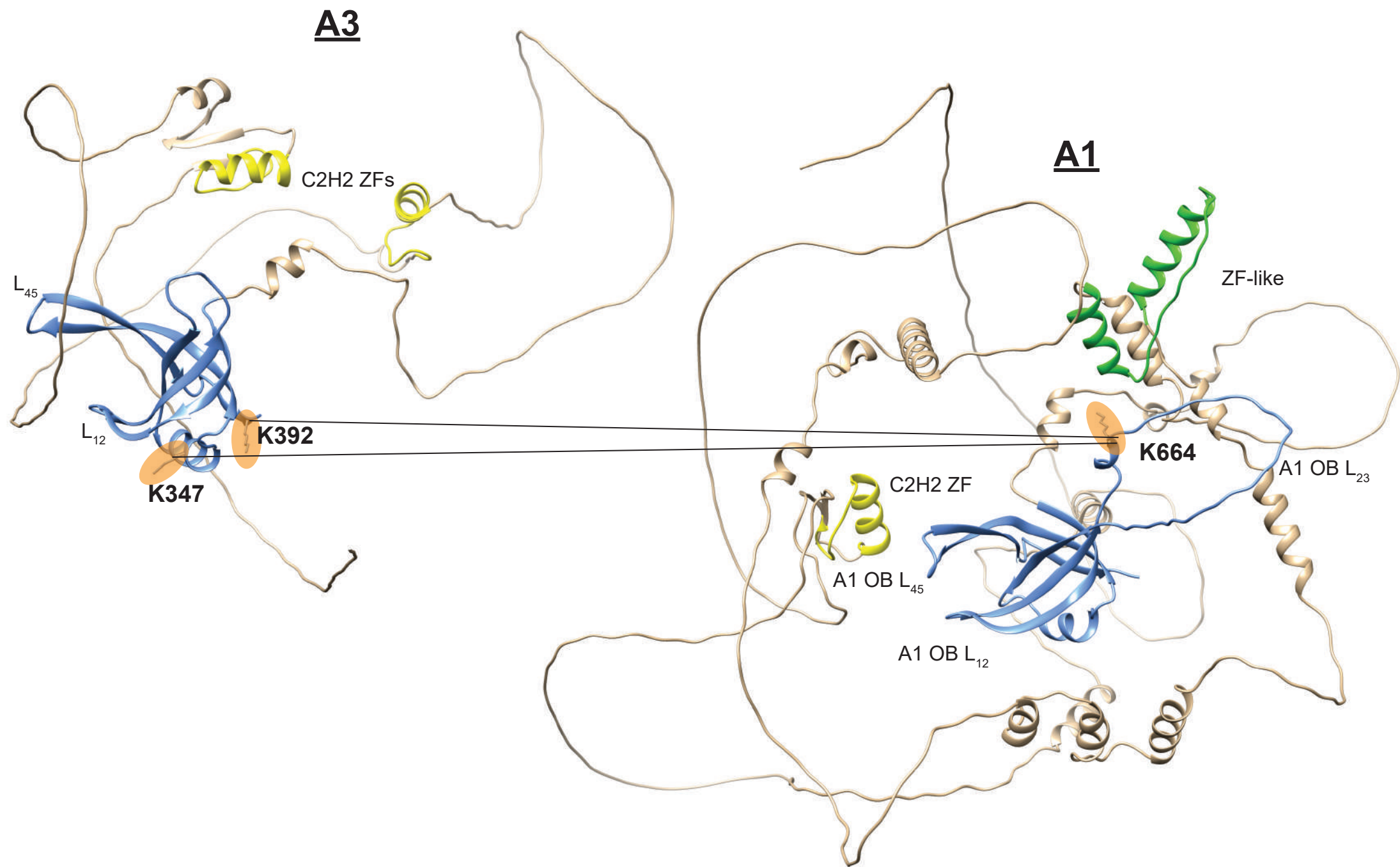


Figure S5F.

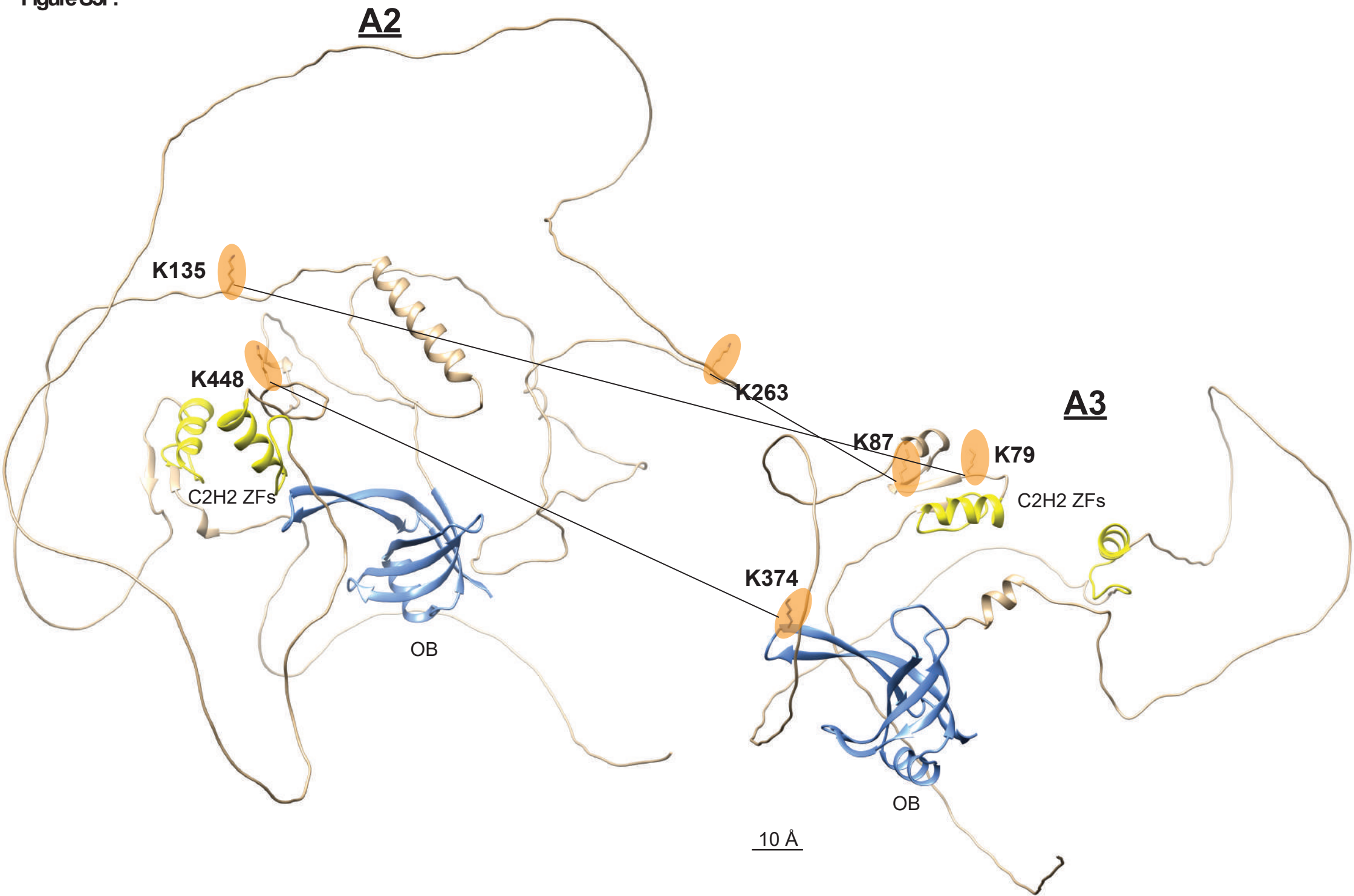


Figure S5G.

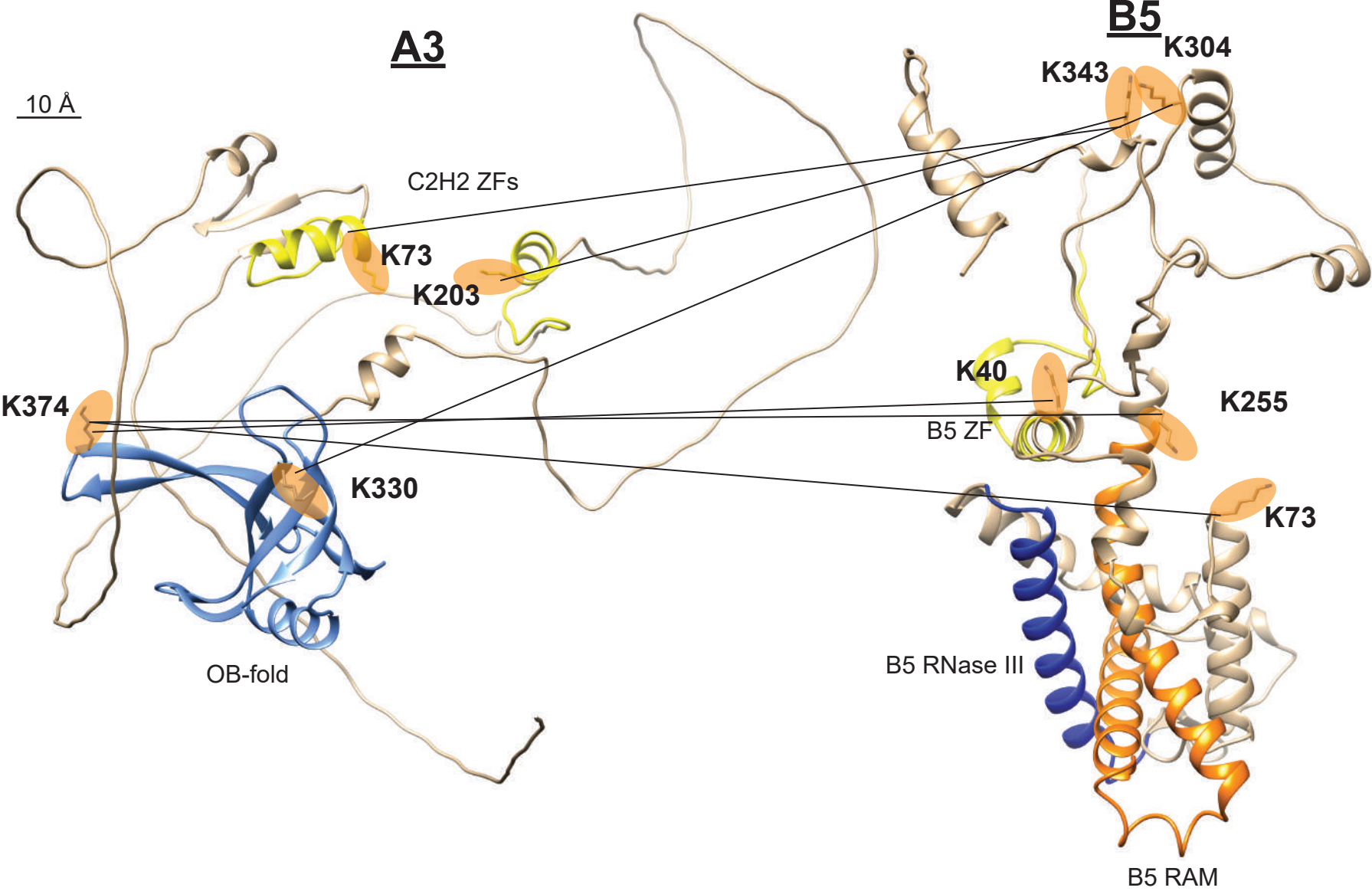


Figure S5H.

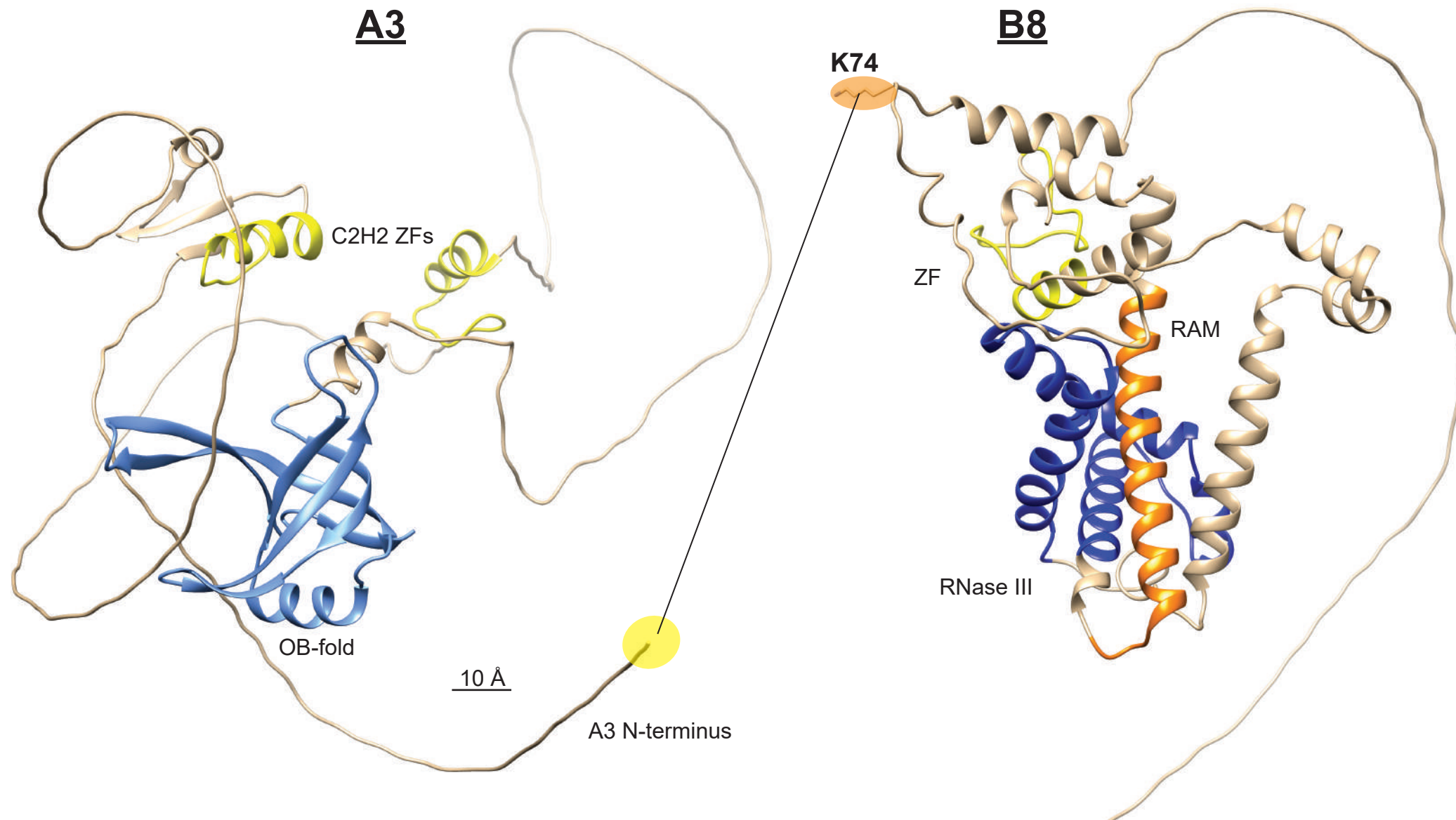


Figure S6

