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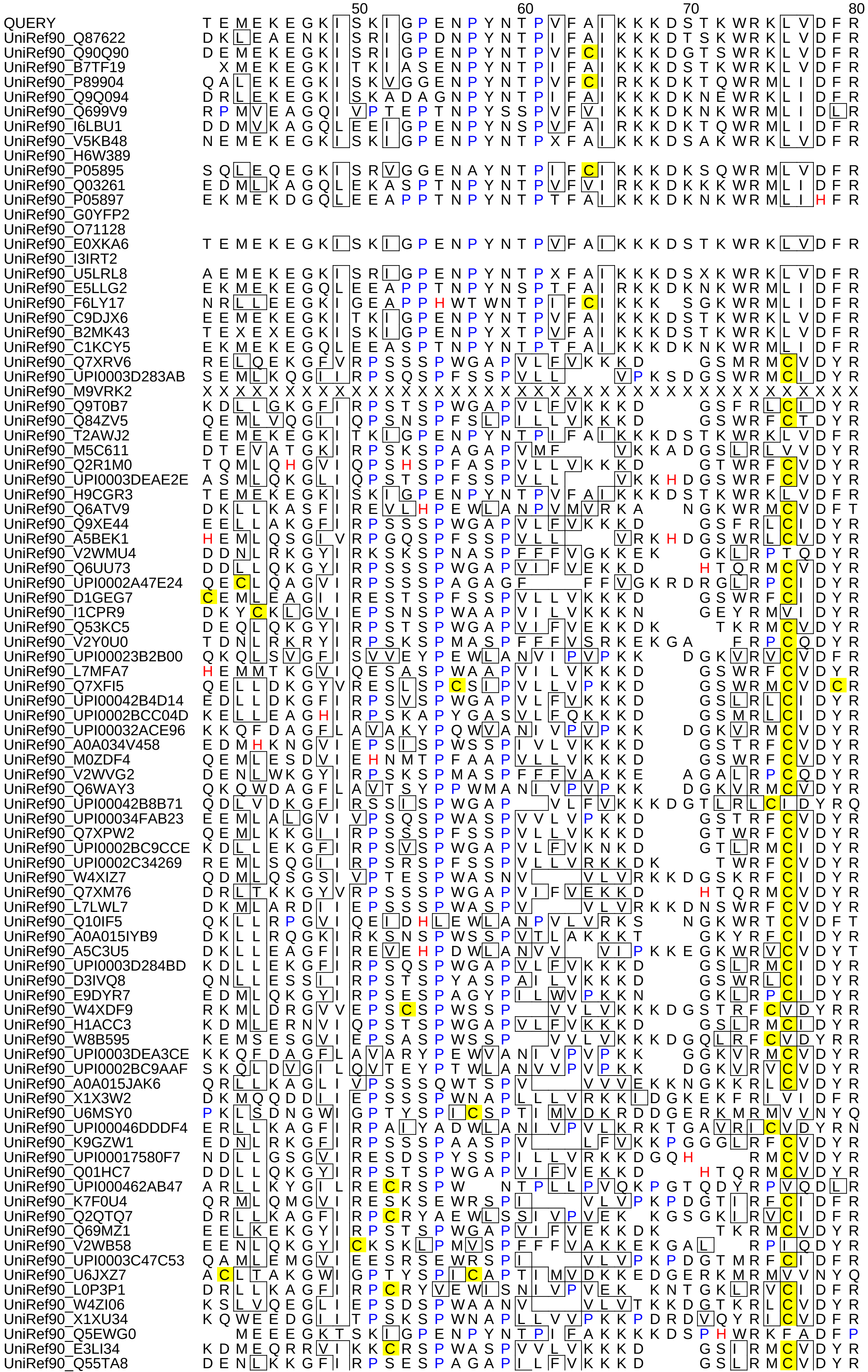

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UniRef90_UPI00046DDDF4  E R L L K A G F I R P A I Y A D W L A N I V P V L K R K T G A V R I C V D Y R N
UniRef90_K9GZW1         E D N L R K G F I R P S S S P A A S P V       L F V K K P G G G L R F C V D Y R
UniRef90_UPI00017580F7  N D L L G S G V I R E S D S P Y S S P I L L V R K K D G Q H       R M C V D Y R
UniRef90_Q01HC7         D D L L Q K G Y I R P S T S P W G A P V I F V E K K D       H T Q R M C V D Y R
UniRef90_UPI000462AB47  A R L L K Y G I L R E C R S P W     N T P L L P V Q K P G T Q D Y R P V Q D L R
UniRef90_K7F0U4         Q R M L Q M G V I R E S K S E W R S P I       V L V P K P D G T I R F C I D F R
UniRef90_Q2QTQ7         D R L L K A G F I R P C R Y A E W L S S I V P V E K   K G S G K I R V C I D F R
UniRef90_Q69MZ1         E E L K E K G Y I R P S T S P W G A P V I F V E K K D K       T K R M C V D Y R
UniRef90_V2WB58         E E N L Q K G Y I C K S K L P M V S P F F F V A K K E K G A L     R P I Q D Y R
UniRef90_UPI0003C47C53  Q A M L E M G V I E E S R S E W R S P I       V L V P K P D G T M R F C I D F R
UniRef90_U6JXZ7         A C L T A K G W I G P T Y S P I C A P T I M V D K K E D G E R K M R M V V N Y Q
UniRef90_L0P3P1         D R L L K A G F I R P C R Y V E W I S N I V P V E K   K N T G K L R V C I D F R
UniRef90_W4ZI06         K S L V Q E G L I E P S D S P W A A N V       V L V T K K D G T K R L C V D Y R
UniRef90_X1XU34         K Q W E E D G I I T P S K S P W N A P L L V V P K K P D R D V Q Y R I C V D F R
UniRef90_Q5EWG0             M E E E G K T S K I G P E N P Y N T P I F A K K K K D S P H W R K F A D F P
UniRef90_E3LI34         K D M E Q R R V I K K C R S P W A S P V V L V K K K D       G S I R M C V D Y R
UniRef90_Q55TA8         D E N L K K G F I R P S E S P A G A P I L F V K K K D       G S L R M C V D Y R
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                                         90                 100                 110                 120
QUERY                   E L N K R T Q D F W E V Q L G I P H P A G L K K K K S V T V L D V G D A Y F S V
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UniRef90_Q90Q90         Q L N R V T Q D F F E V Q L G I P H P G G L K Q C E Q I T I L D I G D A Y F S C
UniRef90_B7TF19         E L N K R T Q D F W E V Q L G I P H P A G L K K K K S V T V L D V G D A Y F S V
UniRef90_P89904         A L N K A T Q D F F E V Q L G I P H P A G L K R K K Q I T V L D I G D A Y Y S I
UniRef90_Q9Q094         Q L N A L T Q D L H E V Q L G I P H P A G I K K C K Q I T V V D I G D A Y F S I
UniRef90_Q699V9         A L N K A T Q D V W E V Q T G I P H P S G L P Q M E Q I T V L D L A D A Y Y S I
UniRef90_I6LBU1         A L N Q A T Q D F A E V Q Q G I P H P S G L P Q M K Q I T V L D M K D A Y Y S I
UniRef90_V5KB48         E L N K R T Q D F W E V Q L G I P H P A G L K K N R S V T V L D V G D A Y F S V
UniRef90_H6W389                                         P P P P G L K R K K S V T I L E V G E A F F F I
UniRef90_P05895         E L N K A T Q D F F E V Q L G I P H P A G L R K M R Q I T V L D V G D A Y Y S I
UniRef90_Q03261         K L N E A T Q D F F E V Q L G I P H P G G L K R Q K   L T I I D L K D A Y Y S V
UniRef90_P05897         E L N R V T Q E L Y R S P I R I P H P A G L A K R K R I T V L D I G D A Y F S I
UniRef90_G0YFP2
UniRef90_O71128             N K V T Q D F T E V Q L G I P H P A G L A K R R R I T V L D V G D A Y F S I
UniRef90_E0XKA6         E L N K R T Q D F W E V Q L G I P H P A G L K K K K S V T V L D V G D A Y F S V
UniRef90_I3IRT2
UniRef90_U5LRL8         E L N K R T Q D F W E V Q L G I P H P A G L K K K K S I S V L D V G D A Y F S V
UniRef90_E5LLG2         E L N R V T Q E F T E I Q L G I P H P A G L A K R K R I T V L D V G D A Y F S I
UniRef90_F6LY17         E L N K Q T E D L T E A Q L G L P H P G G L Q K K K N V T V L D I G D A Y F T I
UniRef90_C9DJX6         E L N K R T Q D F W E V Q L G I P H P A G L K K K K S V T V L D V G D A Y F S V
UniRef90_B2MK43         E L N K K T Q D F W E V Q L G I P H P A G L K K K K S V T V L D V G D A Y F S V
UniRef90_C1KCY5         E L N K V T Q D F T E I Q L G I P H P A G L A K K K R I T V L D V G D A Y F S I
UniRef90_Q7XRV6         S L N E V T I K N Y P L P R I D D L F D Q L K G A K V F S K I D L R S G Y H Q L
UniRef90_UPI0003D283AB  E L N K T I K D K F P I P I I E E L L E E L F G A K Y F S K L D L R Q G Y Y Q V
UniRef90_M9VRK2         X X X X X X X X X X X X X X X X X X X X X X X X X X S V T V L D V G D A Y F S I
UniRef90_Q9T0B7         E L N R V T V K N Y P L P R I D E L L D Q L R G A T C F S K I D L T S G Y H Q I
UniRef90_Q84ZV5         A L N A I T K D S F P M P T V D E L L D E L H G A Q Y F S K L D L R S G Y H Q I
UniRef90_T2AWJ2         E L N K R T Q D F W E V Q L G I P H P A G L K K K K S V T V L D V G D A Y F S V
UniRef90_M5C611         K L N E T I K D V Y P L P R Q D D L M A K L R D A K I F T K L D L R W G Y N N V
UniRef90_Q2R1M0         G L N D I T V K N Y P M P V V D E L L D E L S G L K W F T K L D L R S G Y H Q I
UniRef90_UPI0003DEAE2E  A L N A I T I D R F P I P T I D E L L D E L G S A Q C F S K L D L L Q G Y H Q I
UniRef90_H9CGR3         E L N K R T Q D F W E V Q L G I P H P A G L K K K K S V T V L D V G D A X F S V
UniRef90_Q6ATV9         D L N K C P K D H F P L P R I D Q L V D S T A G C E L L S F L D A Y S G Y H Q I
UniRef90_Q9XE44         G L N K V T V K N Y P L P R I D E L M D Q L G G A Q W F S K I D L A S G Y H Q I
UniRef90_A5BEK1         A L N K E T I K K F P I P I V D E L L D E L H G S T I F S K L D L R S G Y H Q I
UniRef90_V2WMU4         R L N D T V K N A Y P L P L I S D L I D K L R G A T I F S K L D L R N G Y N N V
UniRef90_Q6UU73         A L N D V T I K N Y P L P R I D D L F D Q L K G A I V F S K I D L R S G Y H Q L
UniRef90_UPI0002A47E24  L N S I T V R N T Y P L P L L Q T A F D L L S G A Q V F S K L D L R N A Y H L V
UniRef90_D1GEG7         A L N K T I P D K F P I P V I D Q L L D E L Y G A S V F S K L D L R S G Y H Q I
UniRef90_I1CPR9         K L N A V T K D A Y P L P R I D D L L D T L G K A K V F S A L D M R A G F H Q V
UniRef90_Q53KC5         A L N E V T I K N Y P L P W I D D L F D Q L K G A K V F S K I D L R S G Y H Q L
UniRef90_V2Y0U0         E L N K T I K N T Y P L P L V S D L I D K L K G A K Y F T K L D L R N G Y N N I
UniRef90_UPI00023B2B00  D L N K S P K D D F P L P H I D L L V D G T A G H S M L S F M D G F S G Y N Q I
UniRef90_L7MFA7         R L N A V T K D V Y P L P R I D D A I D C L H S A S Y F S S V D L R S G Y W Q I
UniRef90_Q7XFI5         A I N N I T I R Y H P I P R L D D M L D E L S G S L V F S K I D L R S G Y H Q I
UniRef90_UPI00042B4D14  Q L N K V T V K N Y P L P R I D D L F D Q L Q G A Q C F S K I D L R S G Y H Q L
UniRef90_UPI0002BCC04D  A L N K I I R N K Y P I P L I A D L F D R L G E A K Y F T K M D L R K G Y Y Q V
UniRef90_UPI00032ACE96  D L N K S P K D D F P L P H I D V L V D S T A Q Y S L F S F M D G F S G Y N Q I
UniRef90_A0A034V458     K L N D V T K D S Y P L P R I D D T L D T L S G A K W F S T L D L Q S G Y W Q V
UniRef90_M0ZDF4         R L N D T I K N H F P L P I V D E L L D E L A G A K Y F S K L D L R A S Y H Q T
UniRef90_V2WVG2         D L N N T I K N R Y P L P L V T D L V D K L K T A K V F T K L D L R N G Y N N I
UniRef90_Q6WAY3         D L N R S P K D D F P L P H I D V L V D N T A Q S S V F S F M D G F S G Y N Q I
UniRef90_UPI00042B8B71  L N R V T I K N K Y P L P W I D D L F D Q L R G A M V F S K I D L R F G Y Y Q L
UniRef90_UPI00034FAB23  K L N Q V T T D A Y P M P R V D E L L D H L G N A K Y L T T L D L S R G Y W Q I
UniRef90_Q7XPW2         H L N A I T I K N Y P L P V I D E L L D E L A G A C W F S K L D L R S G Y H Q I
UniRef90_UPI0002BC9CCE  Q L N K V T K N C Y P M P R I D D L F D H L Q G A T I F S K I D L R S G Y H Q L
UniRef90_UPI0002C34269  A W N A T I K D R F P I P V V D E L L D E L H G A T I F T K L D L R A G Y H Q V
UniRef90_W4XIZ7         R L N N V T K D A F P I P R I D E T L D T L G G S E W F S T L D L A S G Y W Q V
UniRef90_Q7XM76         A L N D V T I K N Y P L P R I D D L F D Q L K G A T V F S K I D L R S G Y H Q L
UniRef90_L7LWL7         N L N K V T K D V Y P L P R I D D A L D C L S G S K Y F S S I D L R S G Y W Q I
UniRef90_Q10IF5         D L N K C P K D D F P L P R I D Q L V D S T A G C E L M S F L D A Y S G Y H Q I
UniRef90_A0A015IYB9     Q L N K T I Q D S Y P L P R I D E L L E K Y R K A R W F S S I D L A A E F H Q I
UniRef90_A5C3U5         N L N N C P K D S F P L P R I D Q I I D S T A G Q G M L S F L D A F S G Y H Q I
UniRef90_UPI0003D284BD  Q L N R V T V K N Y P L P R I D D L F D Q L Q G A S H F S K I D L R S G Y H Q V
UniRef90_D3IVQ8         E L N Q T I K N K Y P I P V I E D L L D E L F G A K V F S K L D L R S G Y H Q I
UniRef90_E9DYR7         L L N K I T I K N Y P L P L M T E I R D K V G K A K W F T T L D L K G A Y N L I
UniRef90_W4XDF9         L N D V T I K D A Y P I P R I D D T I Q S L A G A K W F S T L D L A S G Y W Q V
UniRef90_H1ACC3         A L N N T I K N K Y P L P R I D D L F N Q L Q G K K V F S K I D L R S G Y H Q L
UniRef90_W8B595         L N D V T K K D S Y P L P R I D D T L D S L T G T E W F S T L D L K S G Y W Q V
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UniRef90_A0A015JAK6     K L N N V T K D S Y P L P R I D D M L E T L S G T Q W F S S L D L A S G F W Q V
UniRef90_X1X3W2         A L N Q V T L N F H P L P N I T E I L D H L G Q C Q L F S V I D L A S G F Y Q I
UniRef90_U6MSY0         A L N P T I A P D F P L P P I Q T V L E L L G G A K Y F S T L D L E T G F H Q I
UniRef90_UPI00046DDDF4  L N E A S P K D E Y P M P M A D M L V D G A A H N Q M L S F M D G N A G Y N Q I
UniRef90_K9GZW1         A L N A I T K D R Y P L P L T K E T L N N L K G M K F F T K I D I I S A F N N L
UniRef90_UPI00017580F7  Q L N K T I K D R F P L P R V D E H L D K L N G A K F F T T L D L A S G Y Y Q I
UniRef90_Q01HC7         A L N E V T I K N Y P L P R I D D L F D Q L E G A T V F S K I D L R S G Y H Q L
UniRef90_UPI000462AB47  A V N Q A T V T I H P V V P N P Y V L L S L A A A T H F T V L D L K D A F F C I
UniRef90_K7F0U4         K I N A I R F D A Y P M P R V N E L L E R L G K A H Y I S T L D L T K G Y W Q I
UniRef90_Q2QTQ7         D L N K A T P D E Y P M P I A D M M I N D A S G H K V I S F L D G N A G Y N Q I
UniRef90_Q69MZ1         A L N E V T I K N Y P L P R I D D L F D Q L K G A T V F S K I D L R S G Y H Q L
UniRef90_V2WB58         E L N K T V K N A Y P L P L I S E L L N K L K G A
UniRef90_UPI0003C47C53  K V N A I R F D A Y P M P R V D E L L E R L G K A R Y L S T L D L T K G Y W Q I
UniRef90_U6JXZ7         A L N A T I A P E F P M P S V Q S V L E M L G G A T V F S T M D L E A G F H Q I
UniRef90_L0P3P1         D L N R A T P D E Y P M P I A D M L I N D A S G H R V I S F L D G N A G Y N Q I
UniRef90_W4ZI06         L N V A T V K D A Y P V P R I D E T L D A L G G A K W F S T L D L A A G Y W Q V
UniRef90_X1XU34         K L N H I S S D A Y P L P N I T D I L D Q L G K S R Y Y T T L D L A Q G Y H Q V
UniRef90_Q5EWG0         E L N K R T Q D F W E V Q L G I P H P P G L K K K K S V T V L D V G D A Y F S V
UniRef90_E3LI34         K L N A V I K N A H P L P H I E S T L Q A L G R K K W F T T L D L M A G Y W Q I
UniRef90_Q55TA8         G I N K I T I K N Y P L P L I A E L L D R L K S A K
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                                        130                 140                 150                 160
QUERY                  P L D E D F R K Y T A F T I P S I N N E T P G I R Y Q Y N V L P Q G W K G S P A
UniRef90_Q87622        P L D Q D F R K Y T A F T I P S V N N E T P G I R Y C Y N V L P Q G W K G S P A
UniRef90_Q90Q90        P L D E S F R K Y T A F T I P S V N N Q G P G I R Y Q Y N V L P Q G W K G S P A
UniRef90_B7TF19        P L D   E N F R K Y A F T I P S R N N E T P G I R Y Q Y N V L P Q G W K G S P A
UniRef90_P89904        P L D P E F R P Y T A F T I P Q V N N V G P G I R Y Q F N C L P Q G W K G S P T
UniRef90_Q9Q094        P L D P D Y R Q Y T A F T V P S I N N Q E P G R R Y Q Y N V L P Q G W K G S P C
UniRef90_Q699V9        P L D P Q F A R Y T A F T I P S V N N T Q P G E R Y E F R V L P Q G W S A S P A
UniRef90_I6LBU1        P L D P E F S K Y T A F T I P S L N N D R P G R R Y Q F K V L P Q G W K G S P T
UniRef90_V5KB48        P L H E E F R K Y T A F T I P S I N N E T P G V R Y Q Y N V L P Q G W K G S P A
UniRef90_H6W389        S L D K G L W K Y S A F S I P W V N H G A P G V R F P F Q G V S P G R K G S P T
UniRef90_P05895        P L D P N F R K Y T A F T I P T V N N Q G P G I R Y Q F N C L P Q G W K G S P T
UniRef90_Q03261        P L D K E F R P Y T A F T V P S I N N A S P G E R Y Q F T V L P Q G W K G S P T
UniRef90_P05897        P L D E E F R Q Y T A F T L P S V N N A E P G K R Y I Y K V L P Q G W K G S P A
UniRef90_G0YFP2                                        T N N E T P G I R Y Q Y N V L P Q G W K G S P A
UniRef90_O71128        P L D E E F R Q Y T A F T L P S V N N A E P G K R Y I Y K V L P Q G W K G S P A
UniRef90_E0XKA6        P L D K D F R K Y T A F T I P S I N N E T P G I R Y Q Y N V L P Q G W K G S P A
UniRef90_I3IRT2                D F R K Y T A F T I P A I N N Q G P G V R Y Q Y N V L P Q G W K G S P A
UniRef90_U5LRL8        P L X X X F R K Y T A F T I P S T N N E T P G V R Y Q Y N V L P Q G W K G S P A
UniRef90_E5LLG2        P L H E B F R Q Y T A F T L P S V N N A E P G K R Y I Y K V L P Q G W K G S P T
UniRef90_F6LY17        P L Y E P Y R K Y T C F T L L S P N N L G P C R R Y Y W K V L P Q G W K L S P S
UniRef90_C9DJX6        P L D E S F R K Y T A F T I P S T N N E T P G I
UniRef90_B2MK43        P L D X D F R K Y T A F T I P S I N X X T P G I R Y Q Y N V L P X G W K G S P A
UniRef90_C1KCY5        P L H E E F R Q Y T A F T L P S V N N A E P G K R Y I Y K V L P Q G W K G S P A
UniRef90_Q7XRV6        K I R T G D I P K T A F S T R               Y G L Y K F T V M S F G L T N A P A
UniRef90_UPI0003D283AB R M K E D D V E K T G F R T H H               G H F E F L V M P F G L T N A P S
UniRef90_M9VRK2        P L D E E F R K Y T A F T I P S T N N E T P G I R Y Q Y N V L P Q G W K G S P A
UniRef90_Q9T0B7        P I A E A D V R K T A F R T R               Y G H F E F V V M P F G L T N A P A
UniRef90_Q84ZV5        L V Q P E D R E K T A F R T H H               G H Y E W L V M P F G L T N A P A
UniRef90_T2AWJ2        P L D E X F R K Y T A F T I P S X X N X X P G I R Y Q Y N V L P Q G W K G S P A
UniRef90_M5C611        R I K E G D E W K T A F K T K               Y G S F E Y L V M P F G L T N A P A
UniRef90_Q2R1M0        R L V E K D E F K T A F K T H Q               G H Y K F R V M P F G L T N A P A
UniRef90_UPI0003DEAE2E R M H S G D I P K T A F R T H H               G H F E F K V M P F G L C N A S S
UniRef90_H9CGR3        P X X E D F R K Y T A F T I P S X X X X X P X I X X X X X V X X X G X X X S X X
UniRef90_Q6ATV9        S M A K E D E E K T T L I T P               F G V F C Y V K M P F G L I T A G N
UniRef90_Q9XE44        P I E P T D V R K T A F R T R               Y G H F E F V V M P F G L T N A P A
UniRef90_A5BEK1        R V H P E D I P K T A F R T H E               G H Y E F L V I P F G L T N A P T
UniRef90_V2WMU4        R I K D G D Q W K A A F K T N               R G L F E P T V M F F G L M N S P A
UniRef90_Q6UU73        R I K E E D I P K T A F T T R               Y G L F E C T V M S F G L T N A P A
UniRef90_UPI0002A47E24 R I R E G D E W K T A F N T P N               G H F E Y L V M P F G L T N A P A
UniRef90_D1GEG7        R M Q E E D I P K T A F R T V E               G H Y E F L V M P F G L T N A P A
UniRef90_I1CPR9        P M E E D S K E L T A F T T K               Y G T Y H Y N T L P M G L V N S P A
UniRef90_Q53KC5        R I R E E D I S K T A F T T R               Y G L Y E C T V M S F G L T N A P A
UniRef90_V2Y0U0        R I K D G D Q W K A A F K T N               K G L F E P M V M F F G L S N S P A
UniRef90_UPI00023B2B00 L M A P E D M K K T A F I T E W               G T Y C Y R V M P F G L K N A G A
UniRef90_L7MFA7        P M H P E D K E K T A F V T P               D G L F E F N V M P F G L C N A P A
UniRef90_Q7XFI5        R M K L G D E W K T A F K T K               F G L Y E W L V M P F G L T N A P S
UniRef90_UPI00042B4D14 R I R N E D I P K T A F R T R               Y G H Y E F L V M S F G L T N A P A
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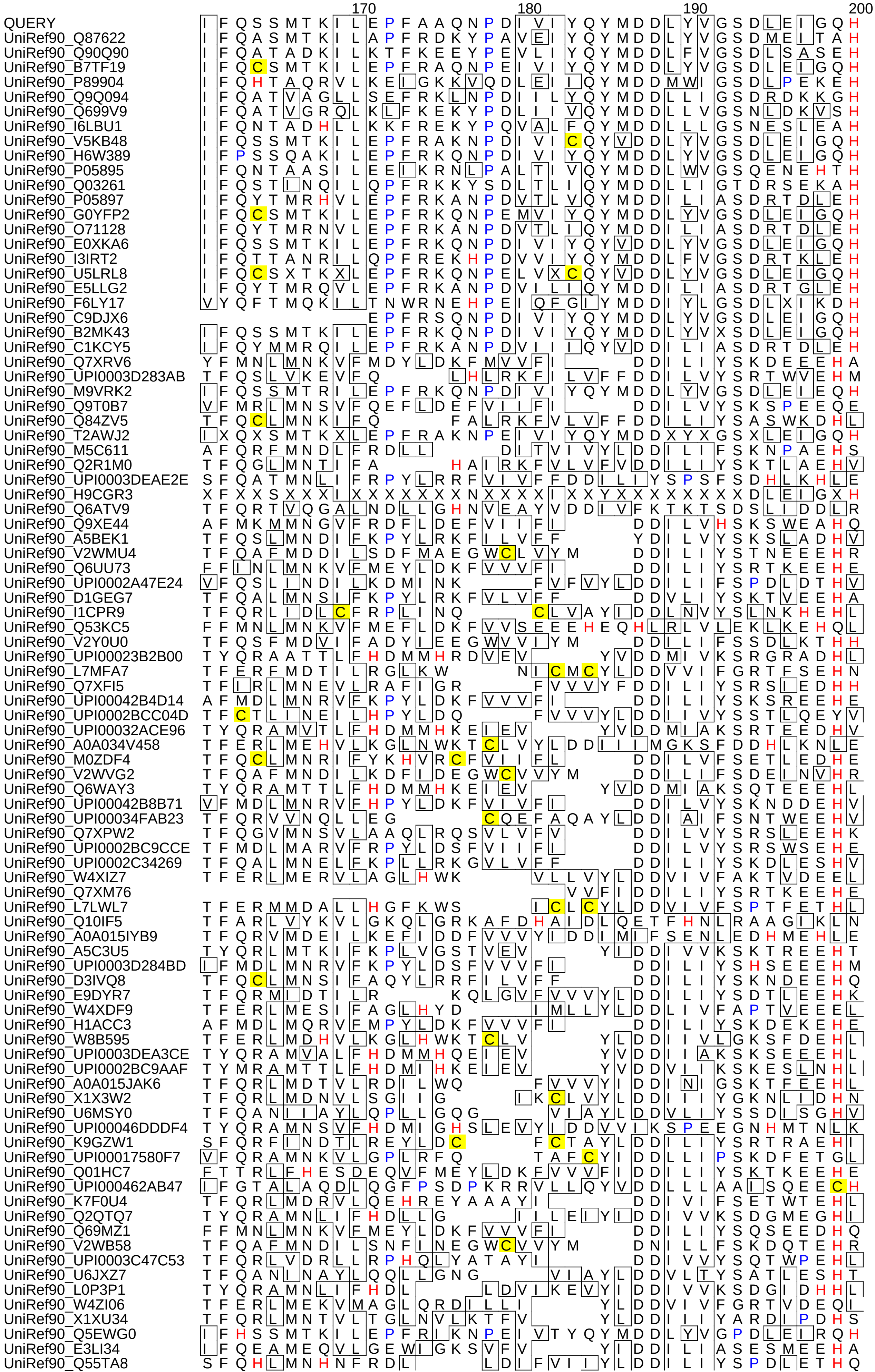

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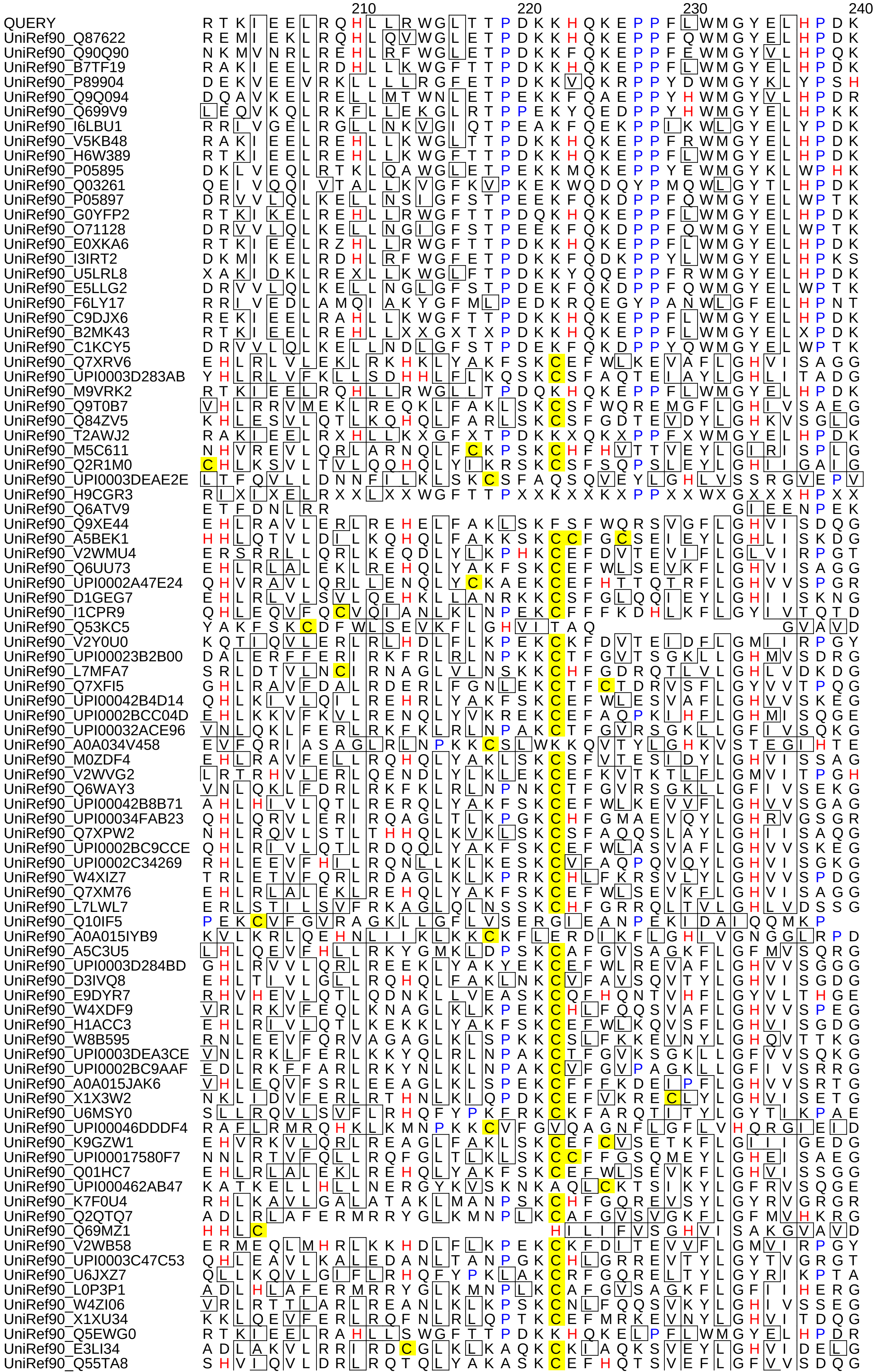

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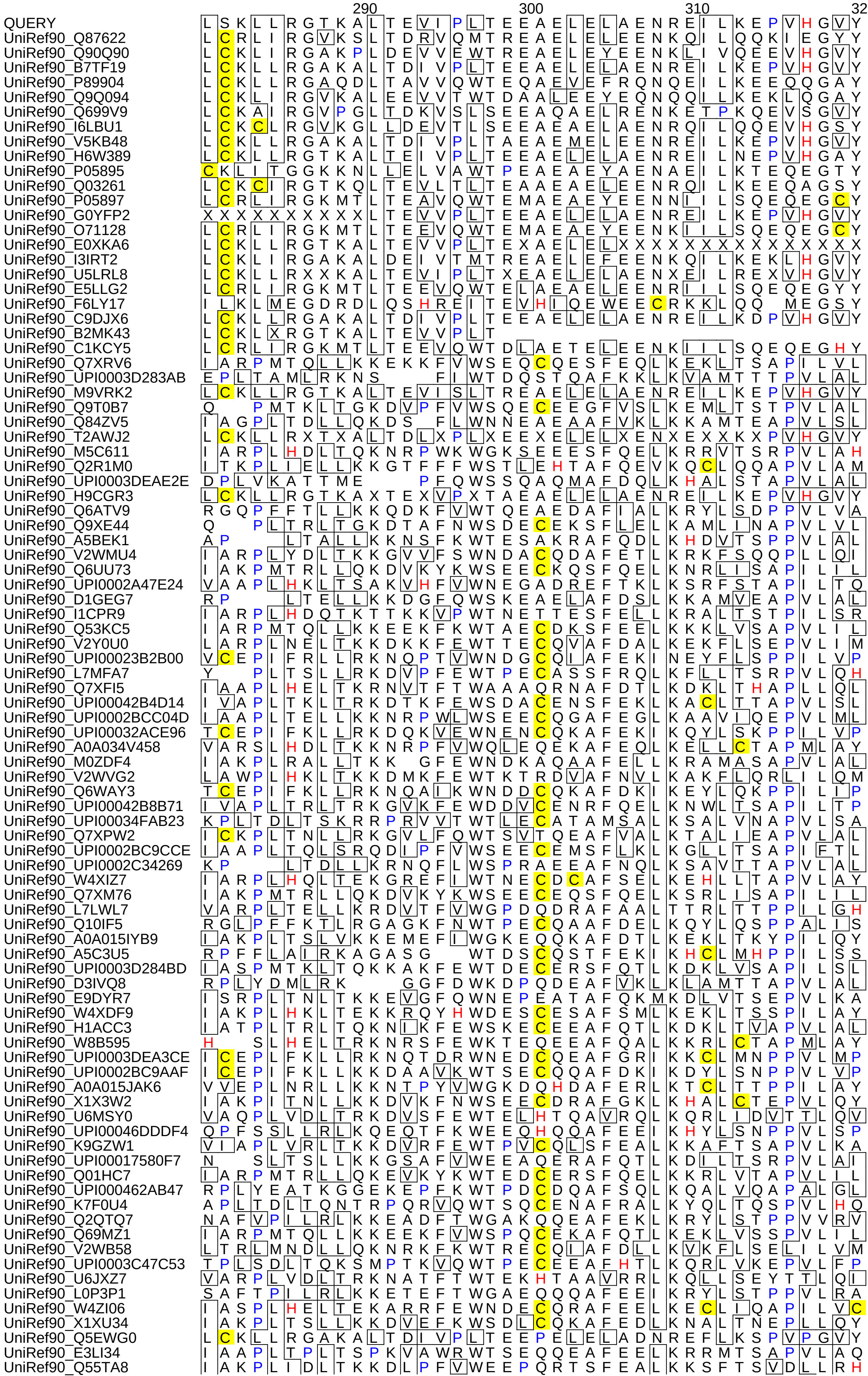

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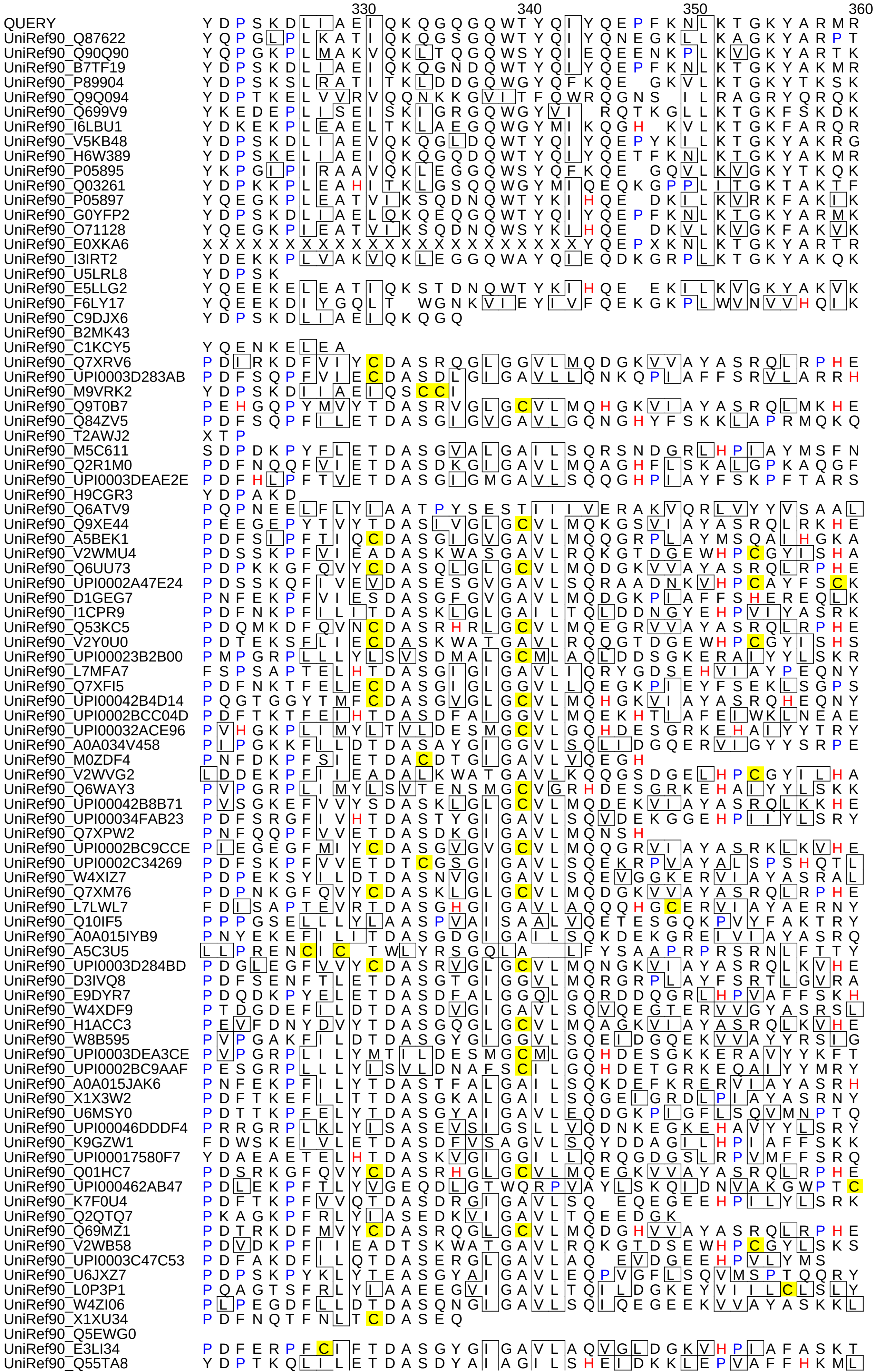

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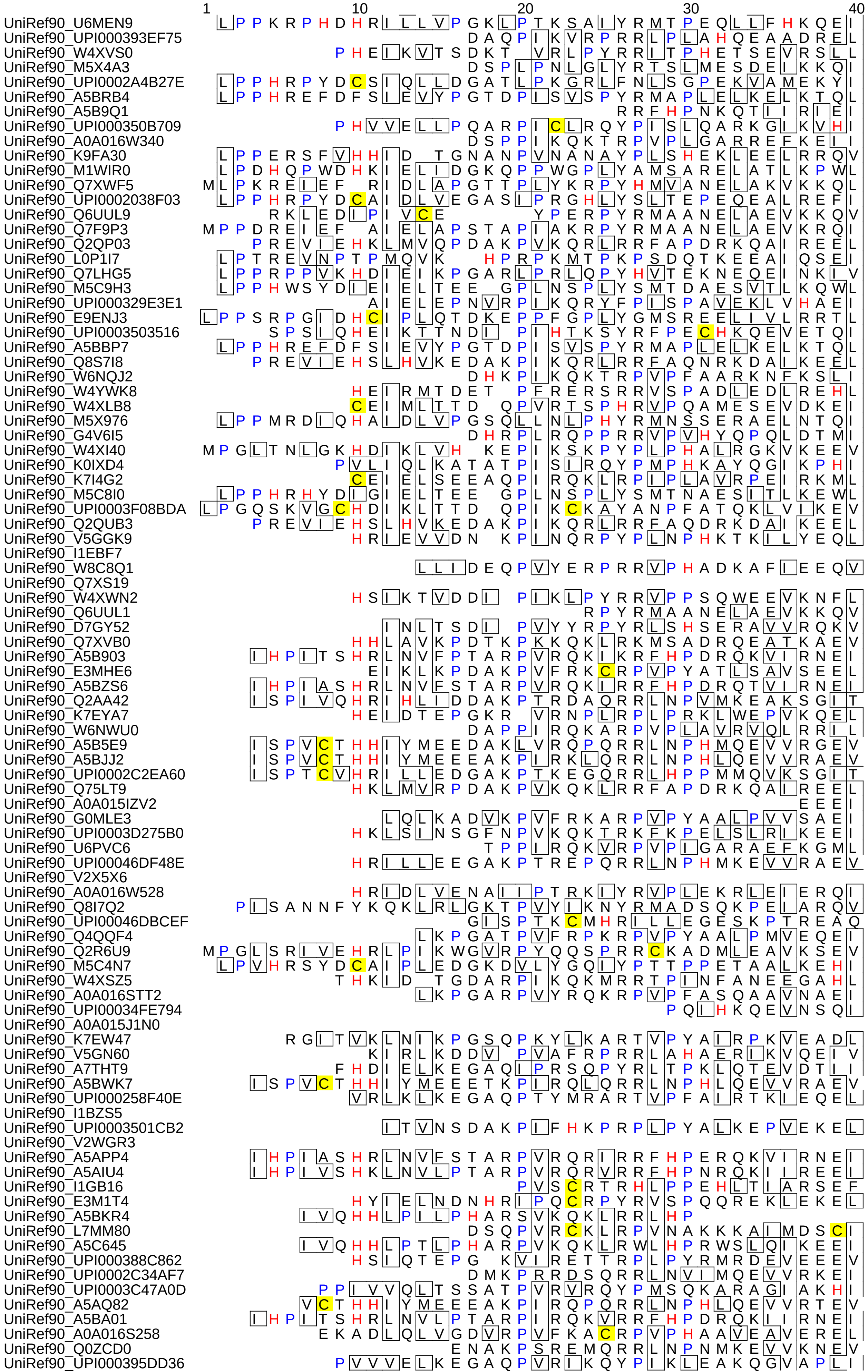

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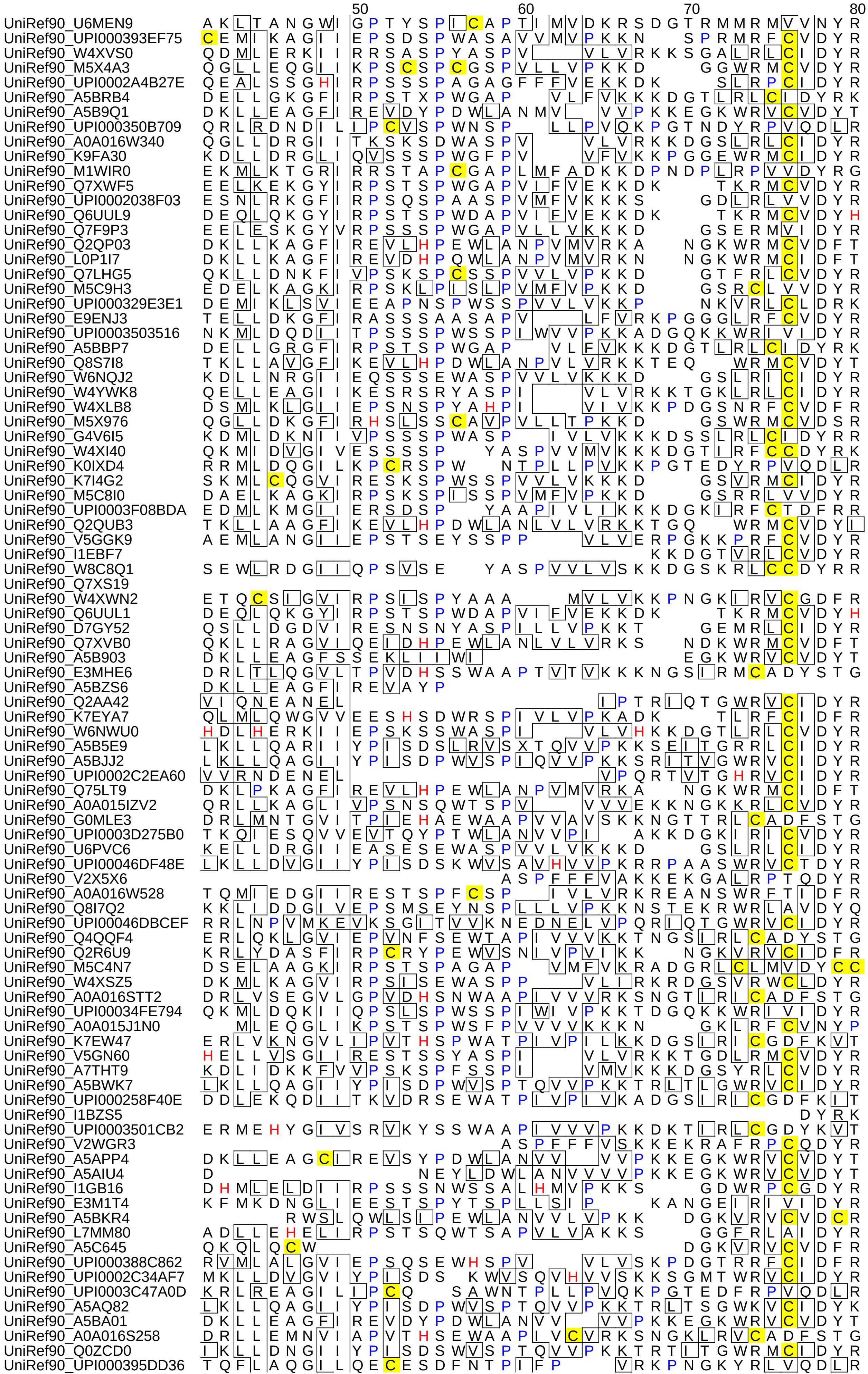

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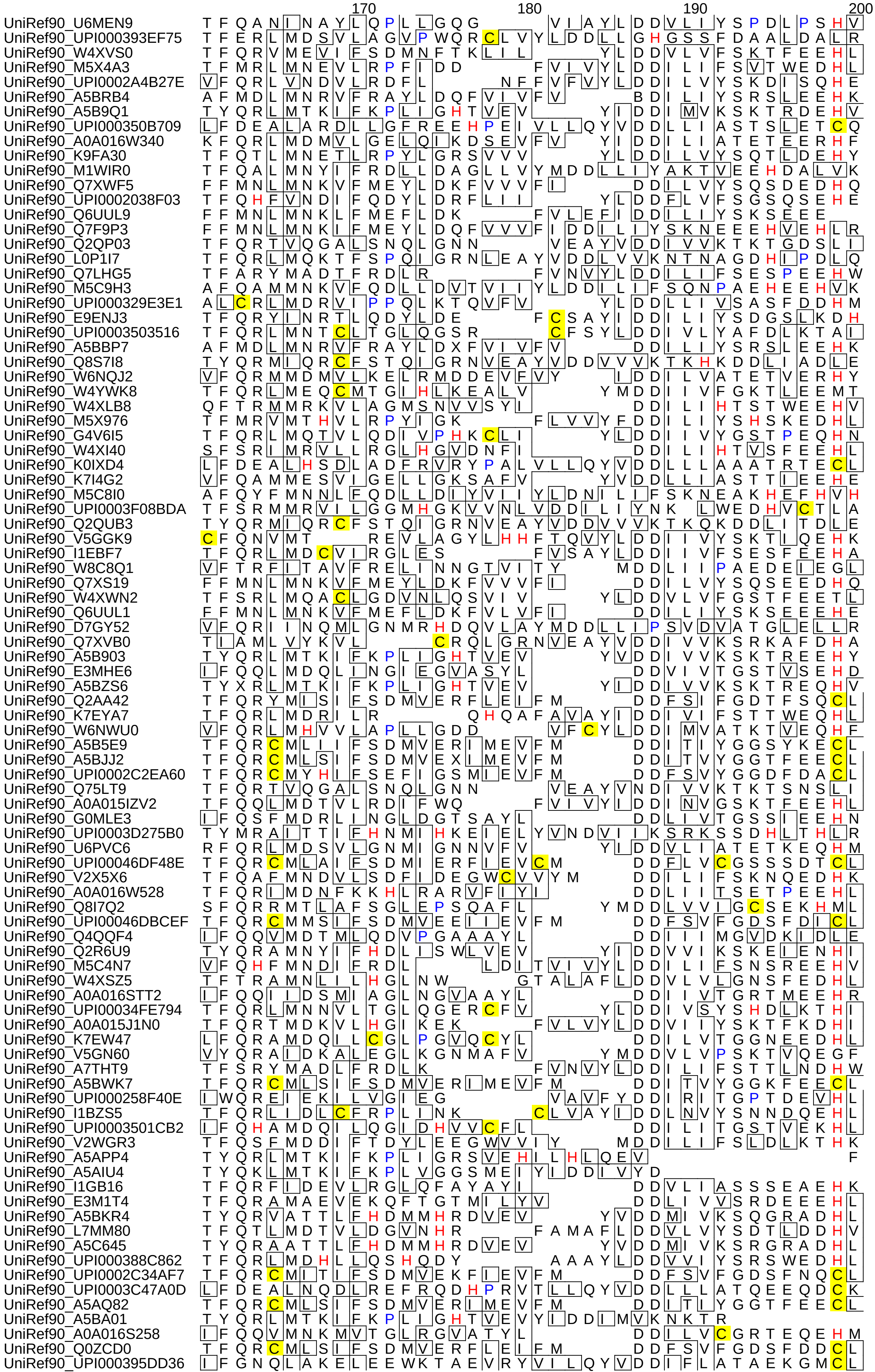

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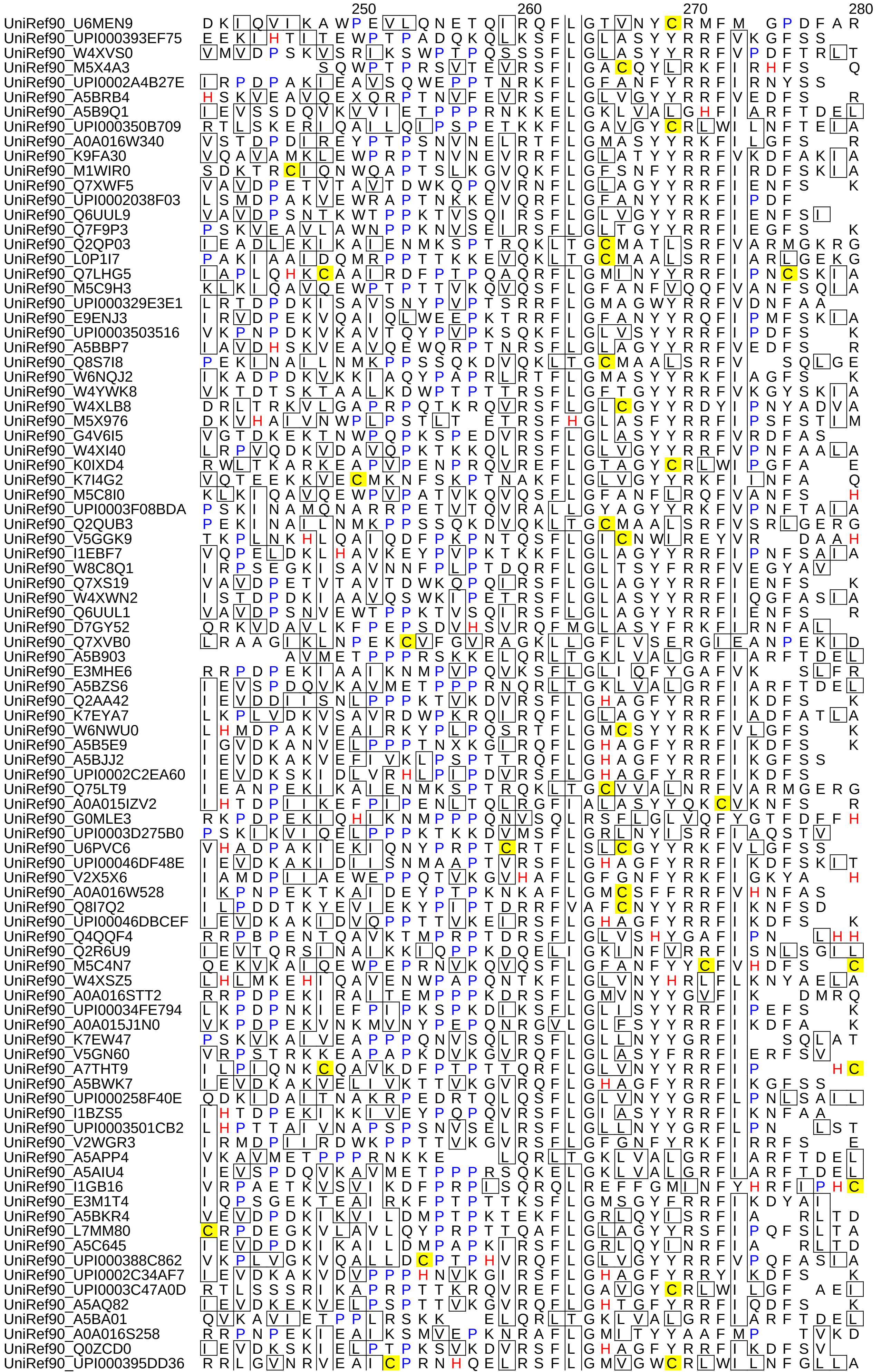

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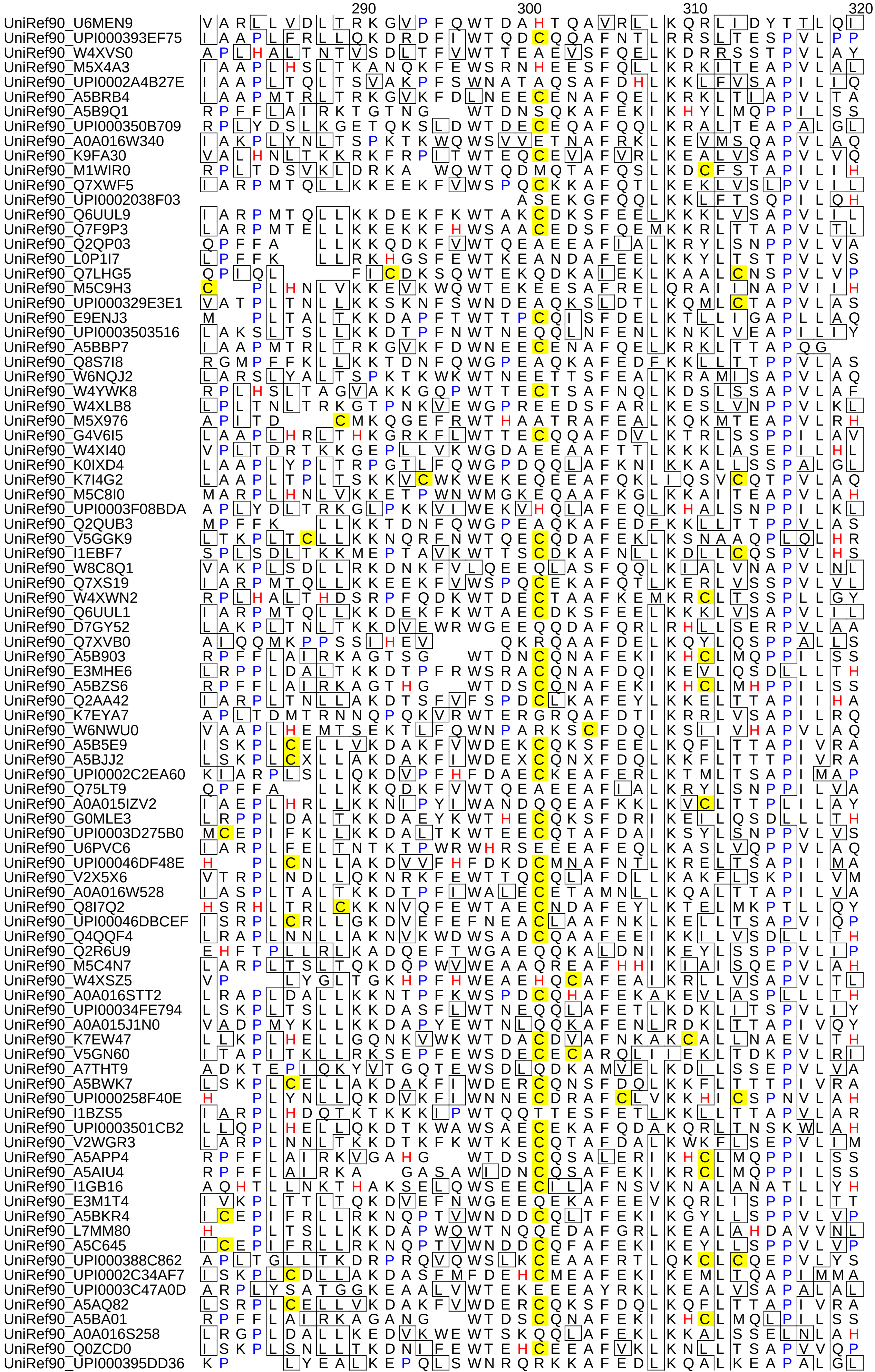

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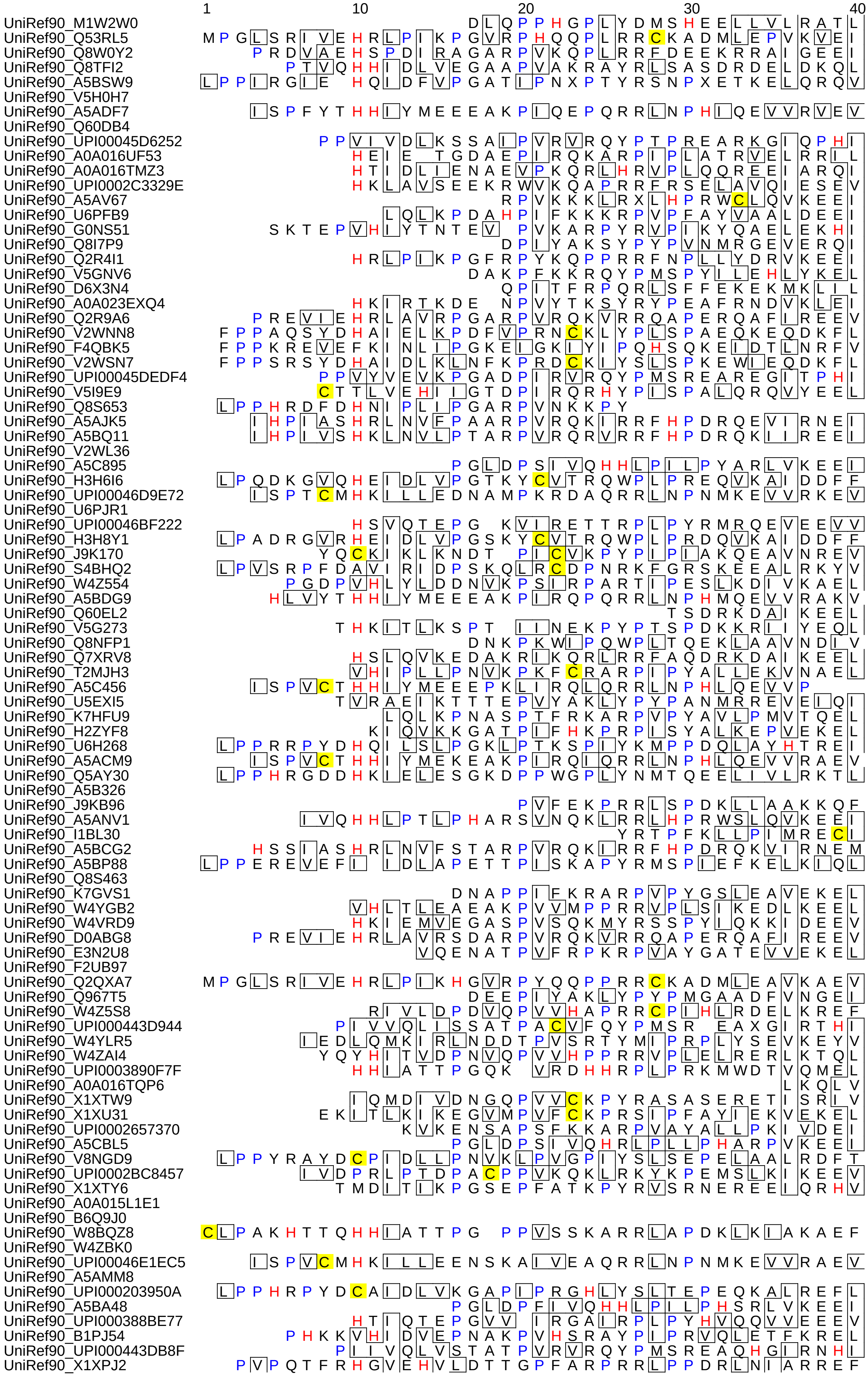
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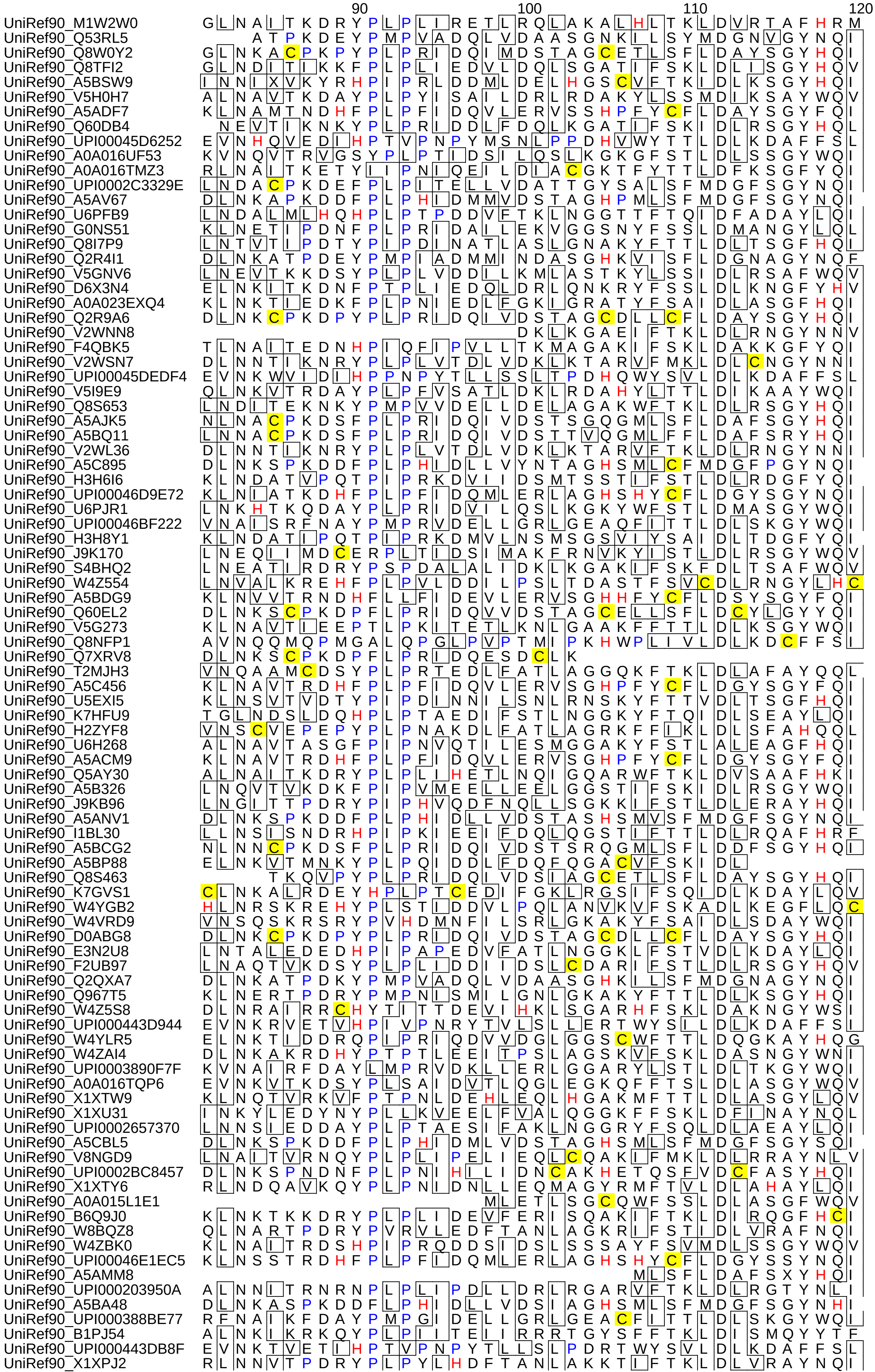

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UniRef90_W4Z554         L N V A L K R E H F P L P V L D D I L P S L T D A S T F S V C D L R N G Y L H C
UniRef90_A5BDG9         K L N V V T R N D H F L L F I D E V L E R V S G H H F Y C F L D S Y S G Y F Q I
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UniRef90_V5G273         K L N A V T I E E P T L P K I T E T L K N L G A A K F F T T L D L K S G Y W Q I
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UniRef90_Q7XRV8         D L N K S C P K D P F L P R I D Q E S D C L K
UniRef90_T2MJH3         V N Q A A M C D S Y P L P R T E D L F A T L A G G Q K F T K L D L A F A Y Q Q L
UniRef90_A5C456         K L N A V T R D H F P L P F I D Q V L E R V S G H P F Y C F L D G Y S G Y F Q I
UniRef90_U5EXI5         K L N S V T V D T Y P I P D I N N I L S N L R N S K Y F T T V D L T S G F H Q I
UniRef90_K7HFU9         T G L N D S L D Q H P L P T A E D I F S T L N G G K Y F T Q I D L S E A Y L Q I
UniRef90_H2ZYF8         V N S C V E P E P Y P L P N A K D L F A T L A G R K F F I K L D L S F A H Q Q L
UniRef90_U6H268         A L N A V T A S G F P I P N V Q T I L E S M G G A K Y F S T L A L E A G F H Q I
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UniRef90_A5BCG2         N L N N C P K D S F P L P R I D Q I V D S T S R Q G M L S F L D D F S G Y H Q I
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UniRef90_K7GVS1         C L N K A L R D E Y H P L P T C E D I F G K L R G S I F S Q I D L K D A Y L Q V
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UniRef90_W4VRD9         V N S Q S K R S R Y P V H D M N F I L S R L G K A K Y F S A I D L S D A Y W Q I
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UniRef90_Q8TFI2         A I A D E D Q Y K T A F T T H               R G Q Y S W R V M P F G L T N A P A
UniRef90_A5BSW9         R M K E G D E W K T X F K T K               Y G L Y E W L V M P F G L T N A P S
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UniRef90_A0A023EXQ4     E M D P E S I P K T A F S T E T               G H Y E F L R M P F G L K N A P P
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UniRef90_F4QBK5         R I R E E D K E K T A V Q T P M               G V Y H Y R V M P M G V R N A P A
UniRef90_V2WSN7         W I K D G D Q W K A A F K T P               R G L F K P T V M F F G L T N S P A
UniRef90_UPI00045DEDF4  P L A P K S Q D L F V F E W A D P S E S I N   G Q L T W T R L P Q R F K N L P T
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UniRef90_K7GVS1         E M D E E S Q H L A V I N T H               K G L F K Y K R M A F G L K T A P A
UniRef90_W4YGB2         K L D A E S S K L T T F Q T P W               G R Y R F L R L P F G L S P S P E
UniRef90_W4VRD9         P L E K S S R D K T S F R T Y               R G Q F Q F R N M C F G L Q G A S G
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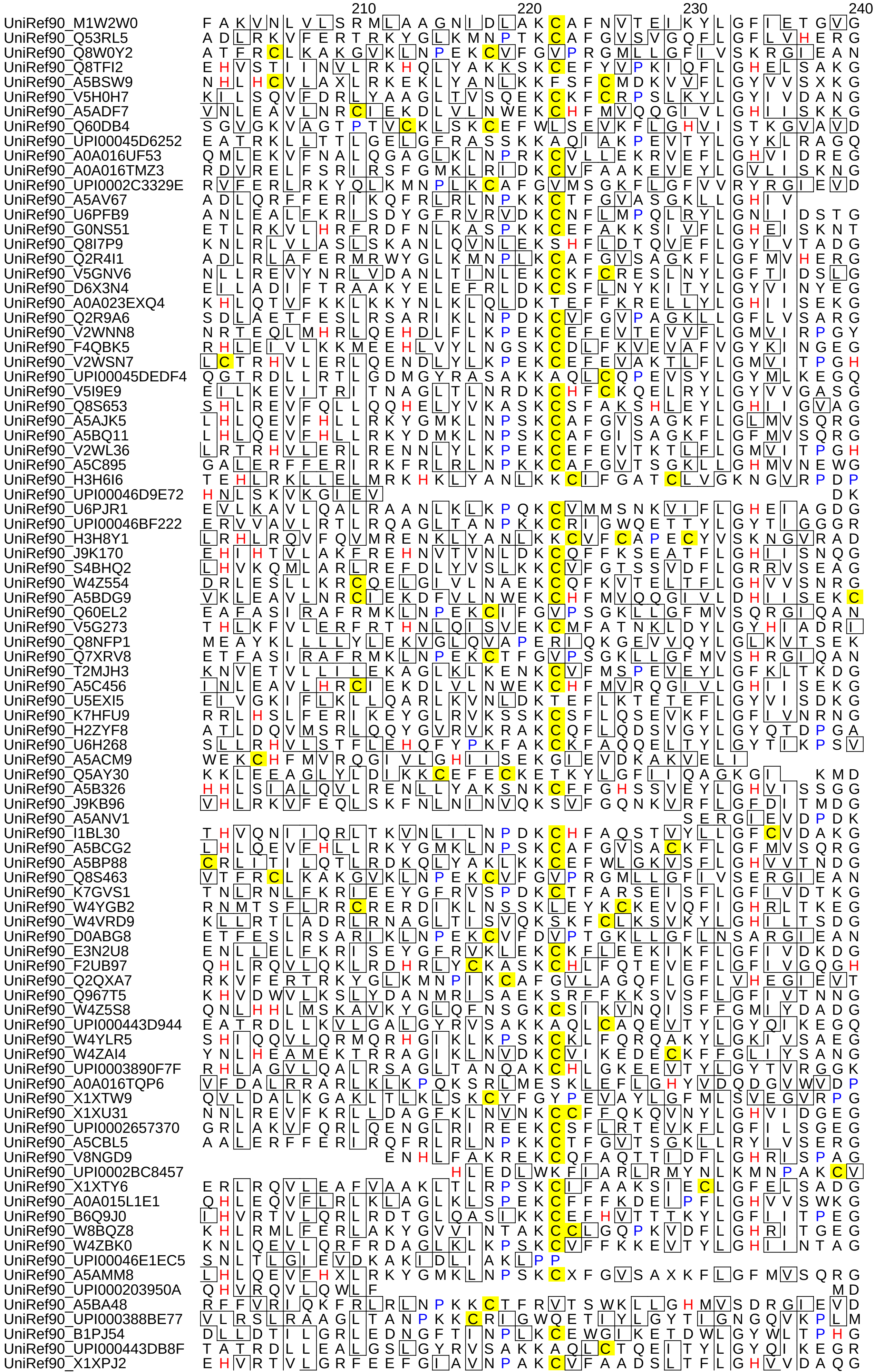

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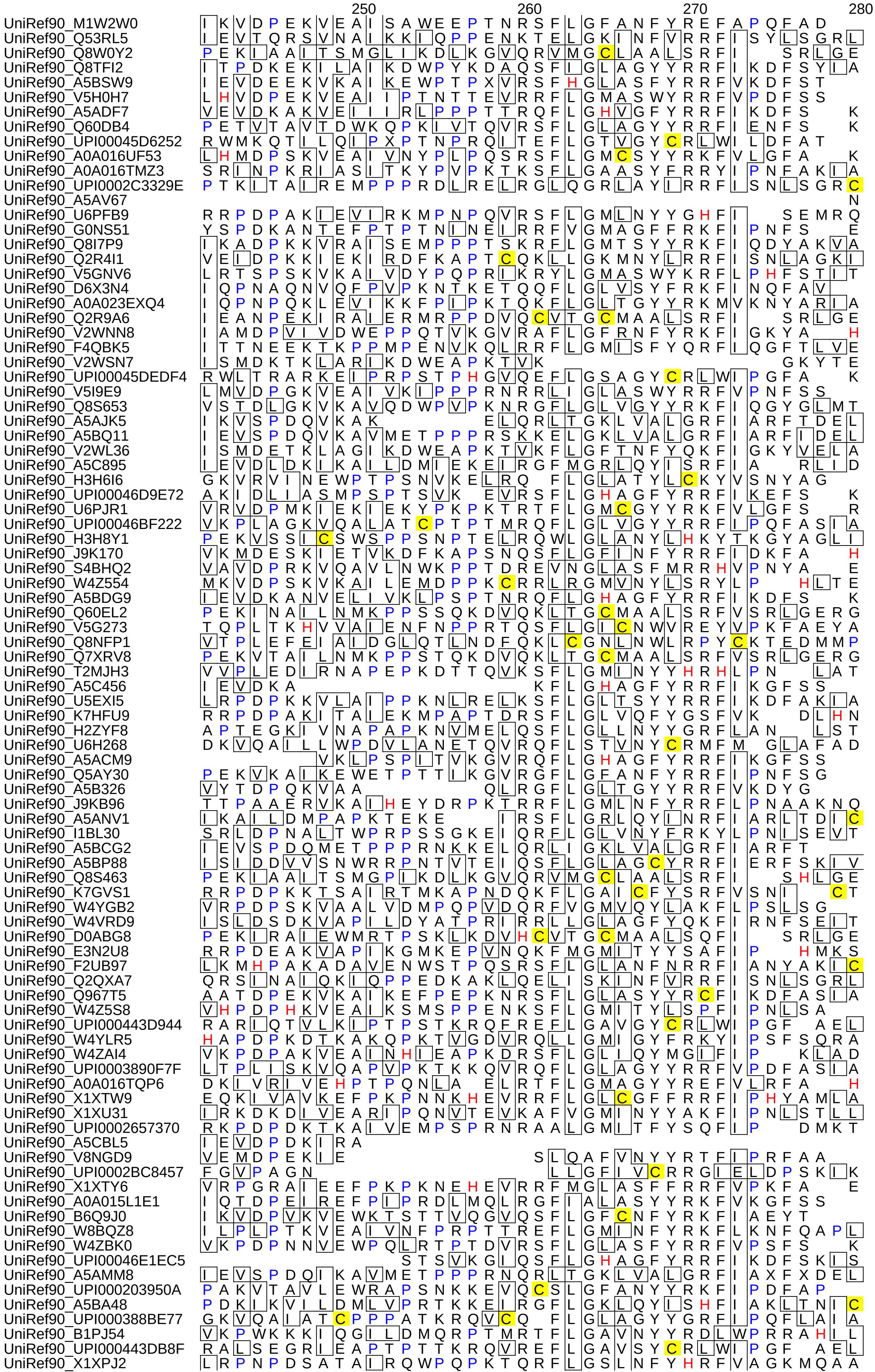

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UniRef90_Q8I7P9         I K A D P K K V R A I S E M P P P T S K R F L G M T S Y Y R K F I Q D Y A K V A
UniRef90_Q2R4I1         V E I D P K K I E K I R D F K A P T C Q K L L G K M N Y L R R F I S N L A G K I
UniRef90_V5GNV6         L R T S P S K V K A I V D Y P Q P R I K R Y L G M A S W Y K R F L P H F S T I T
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UniRef90_A0A023EXQ4     I Q P N P Q K L E V I K K F P I P K T Q K F L G L T G Y Y R K M V K N Y A R I A
UniRef90_Q2R9A6         I E A N P E K I R A I E R M R P P D V Q C V T G C M A A L S R F I     S R L G E
UniRef90_V2WNN8         I A M D P V I V D W E P P Q T V K G V R A F L G F R N F Y R K F I G K Y A     H
UniRef90_F4QBK5         I T T N E E K T K P P M P E N V K Q L R R F L G M I S F Y Q R F I Q G F T L V E
UniRef90_V2WSN7         I S M D K T K L A R I K D W E A P K T V K                             G K Y T E
UniRef90_UPI00045DEDF4  R W L T R A R K E I P R P S T P H G V Q E F L G S A G Y C R L W I P G F A     K
UniRef90_V5I9E9         L M V D P G K V E A I V K I P P P R N R R L I G L A S W Y R R F V P N F S S
UniRef90_Q8S653         V S T D L G K V K A V Q D W P V P K N R G F L G L V G Y Y R K F I Q G Y G L M T
UniRef90_A5AJK5         I K V S P D Q V K A K             E L Q R L T G K L V A L G R F I A R F T D E L
UniRef90_A5BQ11         I E V S P D Q V K A V M E T P P P R S K K E L G K L V A L G R F I A R F I D E L
UniRef90_V2WL36         I S M D E T K L A G I K D W E A P K T V K F L G F T N F Y Q K F I G K Y V E L A
UniRef90_A5C895         I E V D L D K I K A I L D M I E K E I R G F M G R L Q Y I S R F I A     R L I D
UniRef90_H3H6I6         G K V R V I N E W P T P S N V K E L R Q   F L G L A T Y L C K Y V S N Y A G
UniRef90_UPI00046D9E72  A K I D L I A S M P S P T S V K   E V R S F L G H A G F Y R R F I K E F S     K
UniRef90_U6PJR1         V R V D P M K I E K I E K Y P K P K T R T F L G M C G Y Y R K F V L G F S     R
UniRef90_UPI00046BF222  V K P L A G K V Q A L A T C P T P T M R Q F L G L V G Y Y R R F I P Q F A S I A
UniRef90_H3H8Y1         P E K V S S I C S W S P P S N P T E L R Q W L G L A N Y L H K Y T K G Y A G L I
UniRef90_J9K170         V K M D E S K I E T V K D F K A P S N Q S F L G F I N F Y R R F I D K F A     H
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UniRef90_W4Z554         M K V D P S K V K A I L E M D P P K C R R L R G M V N Y L S R Y L P     H L T E
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UniRef90_Q60EL2         P E K I N A I L N M K P P S S Q K D V Q K L T G C M A A L S R F V S R L G E R G
UniRef90_V5G273         T Q P L T K H V V A I E N F N P P R T Q S F L G I C N W V R E Y V P K F A E Y A
UniRef90_Q8NFP1         V T P L E F E I A I D G L Q T L N D F Q K L C G N L N W L R P Y C K T E D M M P
UniRef90_Q7XRV8         P E K V T A I L N M K P P S T Q K D V Q K L T G C M A A L S R F V S R L G E R G
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UniRef90_A5C456         I E V D K A                             K F L G H A G F Y R R F I K G F S S
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UniRef90_K7HFU9         R R P D P A K I T A I E K M P A P T D R S F L G L V Q F Y G S F V K     D L H N
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UniRef90_A5BP88         I S I D D V V S N W R R P N T V T E I Q S F L G L A G C Y R R F I E R F S K I V
UniRef90_Q8S463         P E K I A A I T S M G P I K D L K G V Q R V M G C L A A L S R F I     S H L G E
UniRef90_K7GVS1         R R P D P K K T S A I R T M K A P N D Q K F L G A I C F Y S R F V S N I     C T
UniRef90_W4YGB2         V R P D P S K V A A L V D M P Q P V D Q R F V G M V Q Y L A K F L P S L S G
UniRef90_W4VRD9         I S L D S D K V A P I L D Y A T P R I R R L L G L A G F Y Q K F I R N F S E I T
UniRef90_D0ABG8         P E K I R A I E W M R T P S K L K D V H C V T G C M A A L S Q F I     S R L G E
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UniRef90_W4ZAI4         V K P D P A K V E A I N H I E A P K D R S F L G L I Q Y M G I F I P     K L A D
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UniRef90_B6Q9J0         I K V D P V K V E W K T S T T V Q G V Q S F L G F C N F Y R K F I A E Y T
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UniRef90_Q8TFI2         K P L H Q L A         A Q K I K W T D E C K E S L D K L K R Q L S T A P I I I P
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UniRef90_Q8I7P9         K Y A N I K S S Q S S K V P I T L D E T A L Q S F N D L K S I L C S S E I L A F
UniRef90_Q2R4I1         D A F V P I L R L K K E A D F T W G A K Q Q E A F E E L K R Y L S T P P V
UniRef90_V5GNV6         G P L N L R G P K K K N R P I E W N E R A E E A F N E I K Q R L I S A P I L A A
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UniRef90_V2WNN8         L T R P L N N L L Q K N R K F E W T V Q C Q I A F D L L K V K F L S E P I L I M
UniRef90_F4QBK5         P M R E A I A I K E K T K A G E L Q D N G W K A V L K C K E I L T S K P V M K I
UniRef90_V2WSN7         L A R P L H E L T K K N M K F E W T K I R D V A F N I L K V K F L Q R P I L Q M
UniRef90_UPI00045DEDF4  L A K P L Y E A T R E G Q K F Q C A E T M E K S F N S L K T A F L S A P A V G L
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UniRef90_Q7XRV8         M P F F K     L L K K T D D F Q W G P E A Q K A F E D F K K L L T K P P V L A S
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UniRef90_K7HFU9         F R G P L D E L T K K D V D F V W T K S C E S S F G R I K D V L K S D L L L T H
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UniRef90_A5ANV1         E P I F R L L R K N Q P                             T I K E Y L L S P P V L V P
UniRef90_I1BL30         A P L D K L R F E G K L D K L   W T S E Q E S A F E K I K S L L S S A P L L H H
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UniRef90_Q8S463         R G L P L Y R L L R K A E C F A W T P E A E E A L G N L K A L L T K A P V L V P
UniRef90_K7GVS1         L R G P L D R L M K K D V T W K W T N V E Q E A F E K L K T A V A D N T M L S H
UniRef90_W4YGB2         L S E P L R R L T H K D T P W N W G E E Q S R A F I A I K G L V T E A P V L R Y
UniRef90_W4VRD9         T P I S D L L K G G D K T K F K W S E A A D S A L R R L K E A L V S P P I L T N
UniRef90_D0ABG8         K A L P Q F K L L K R S G P F T W T E E A E R A L T Q L K A Y L S S S P I L V A
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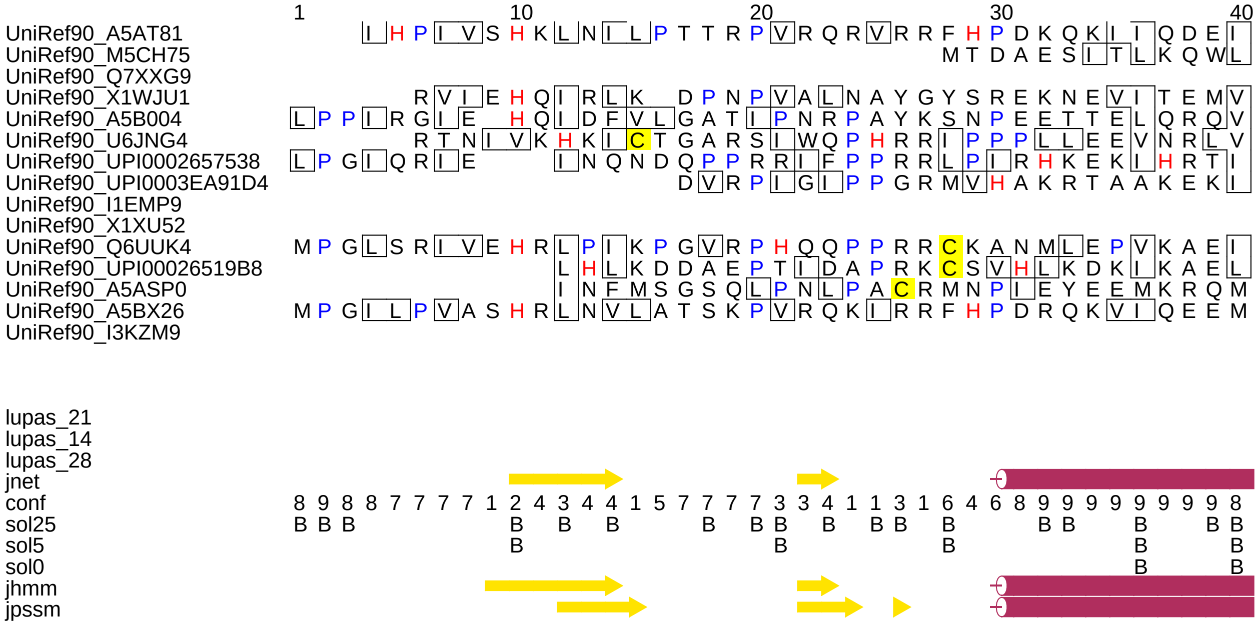

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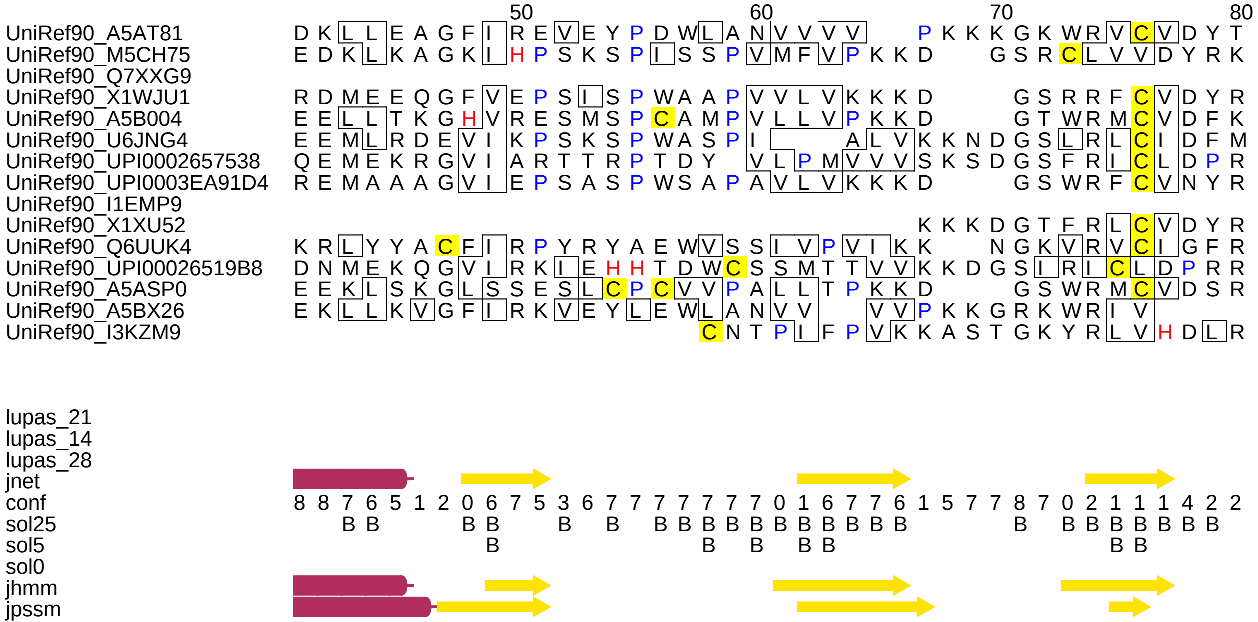

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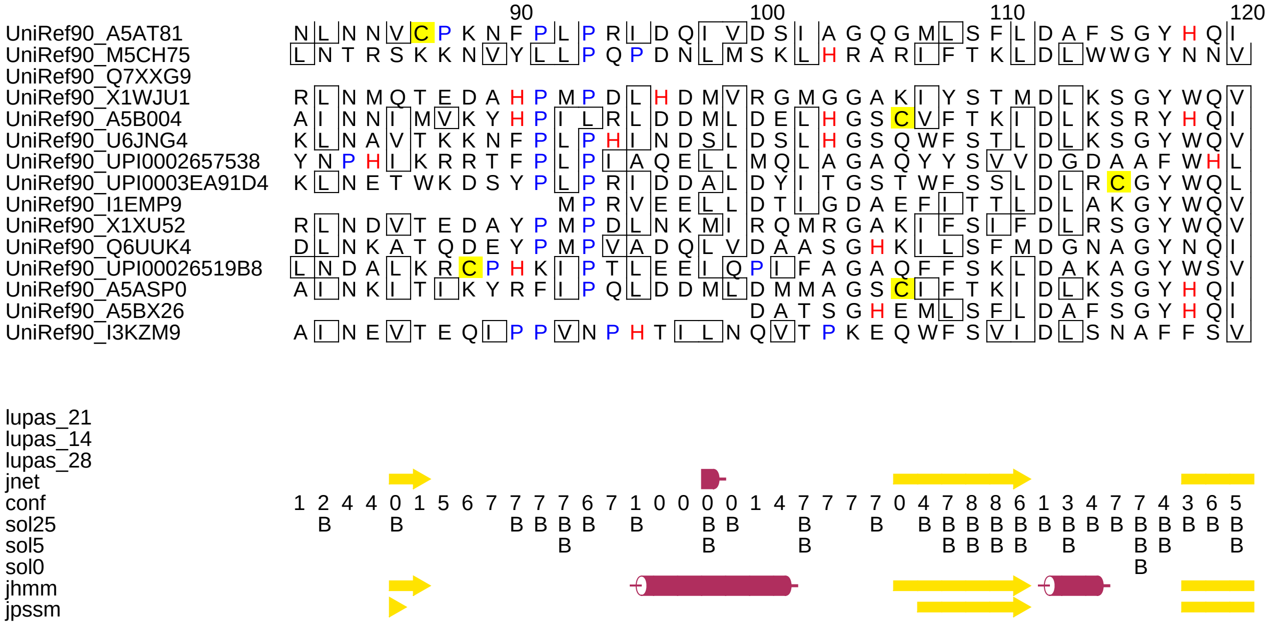

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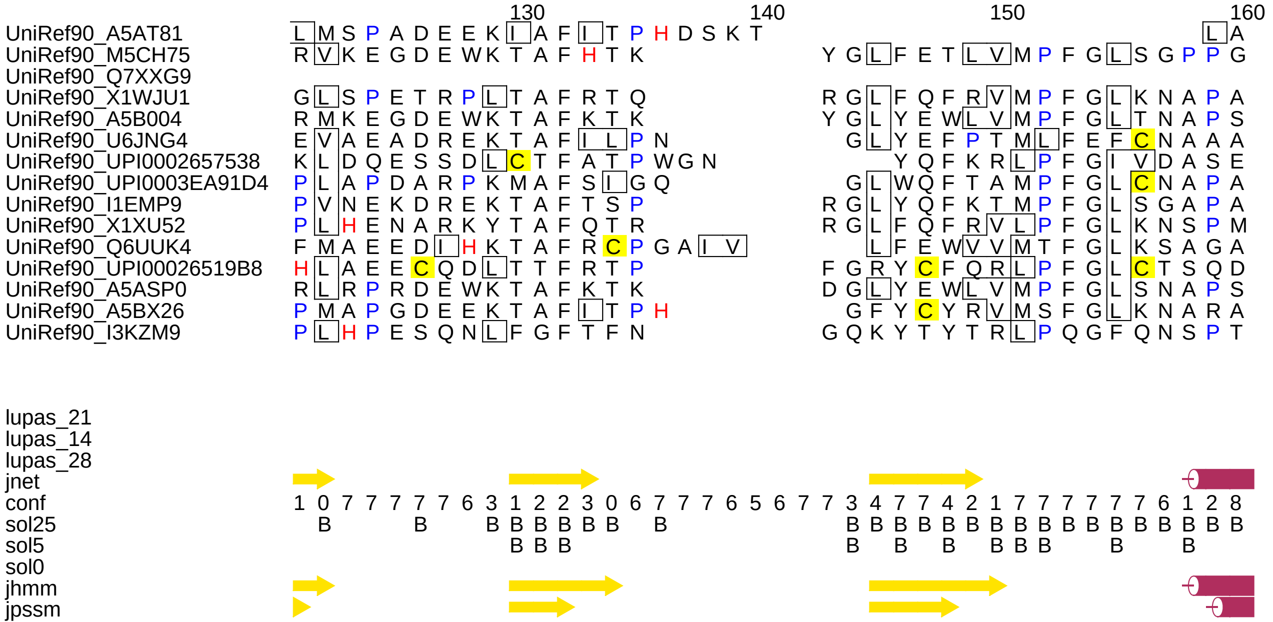

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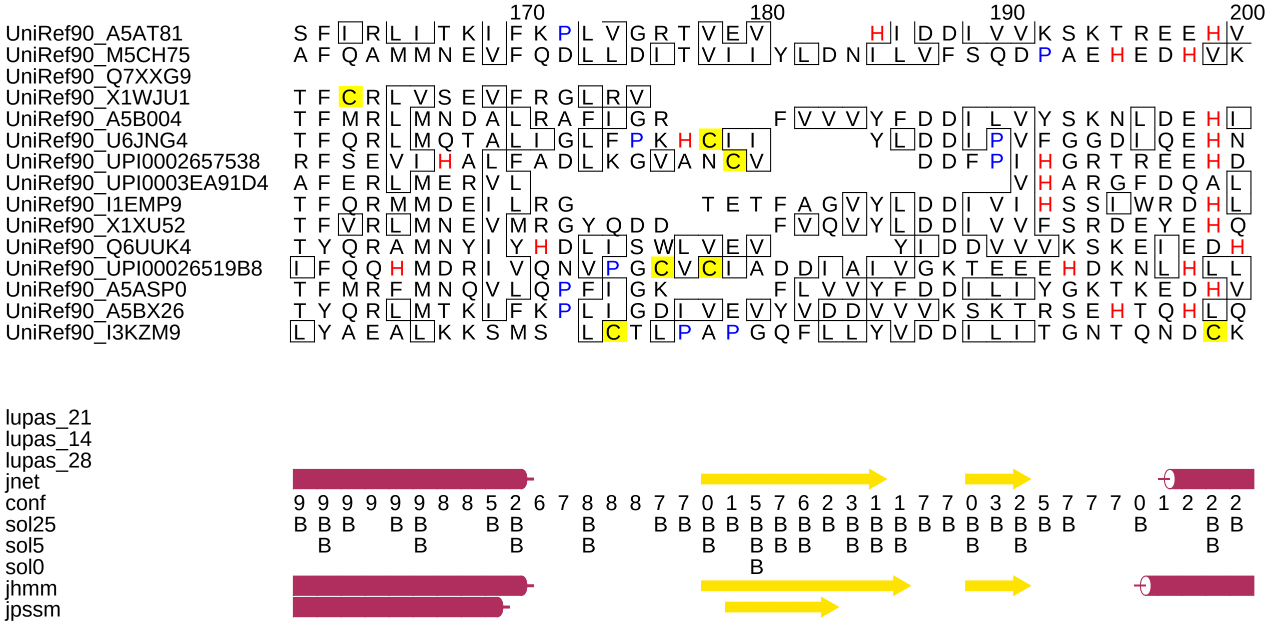

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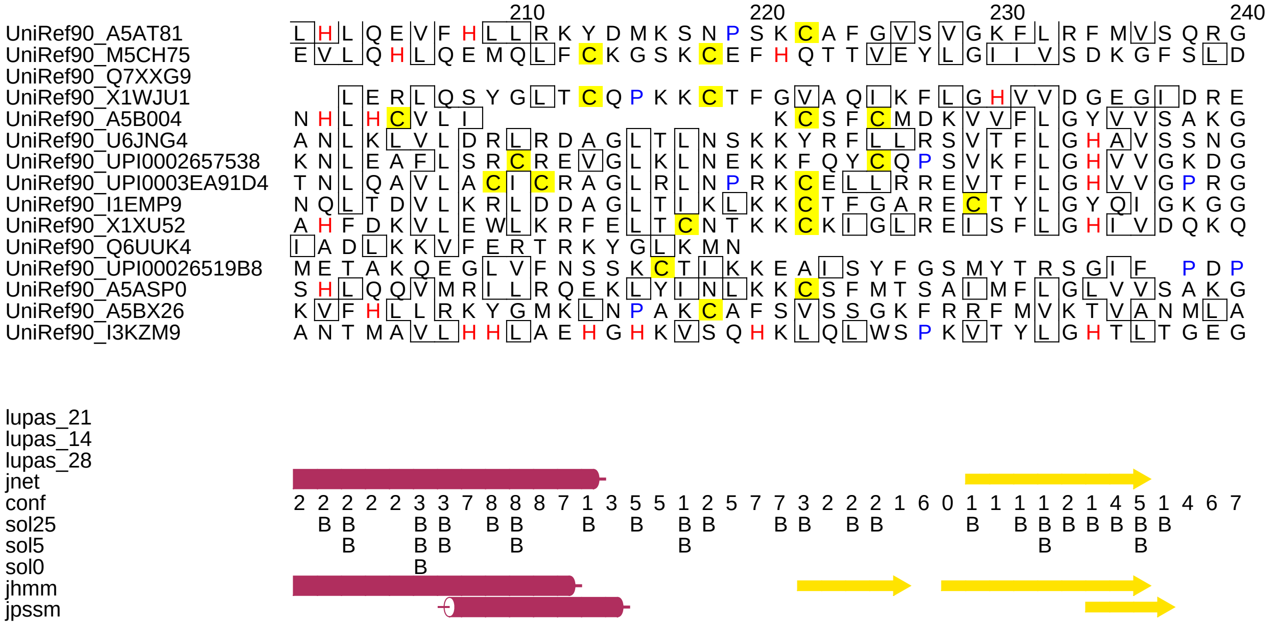

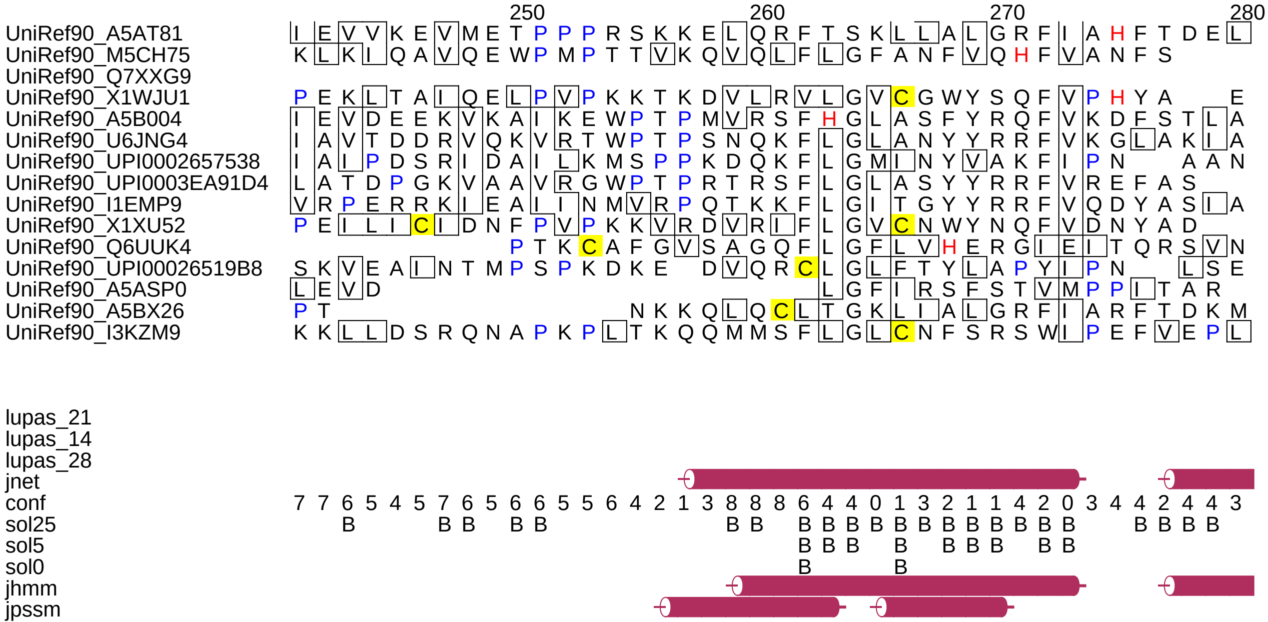

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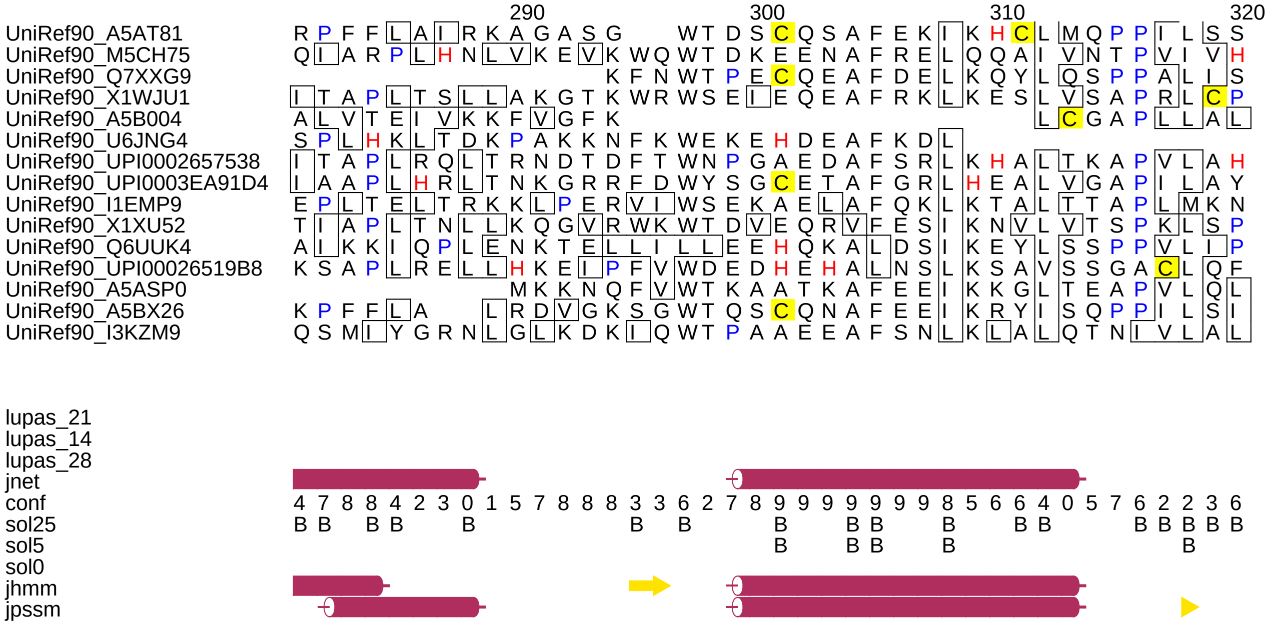290
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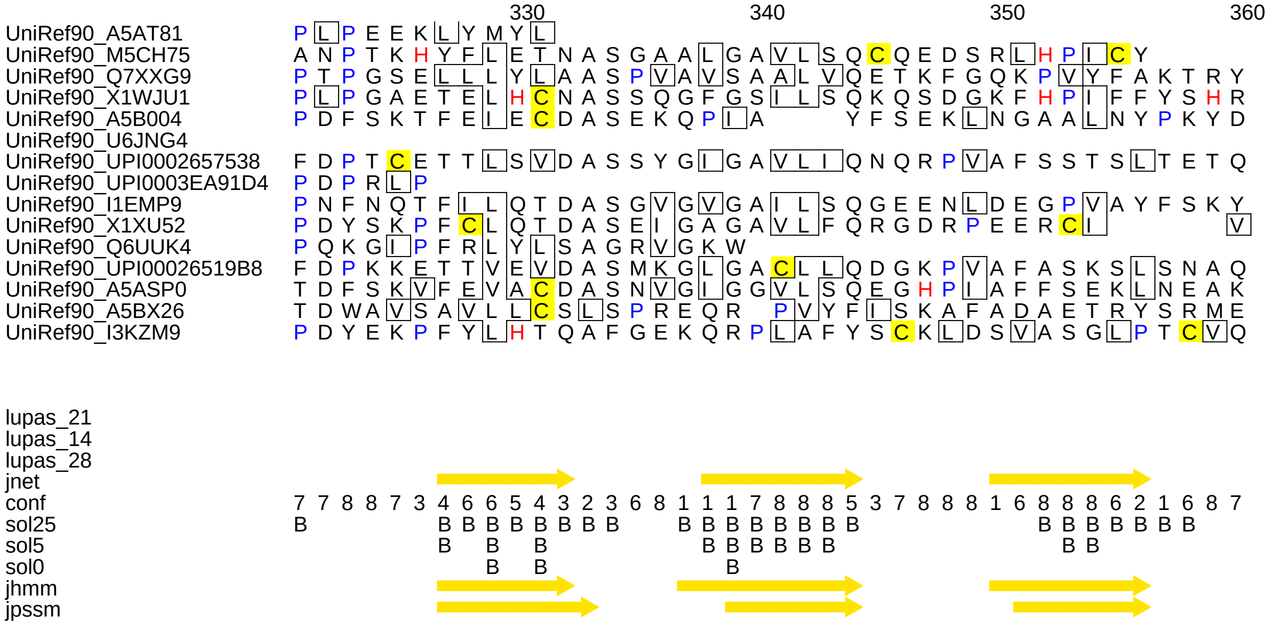

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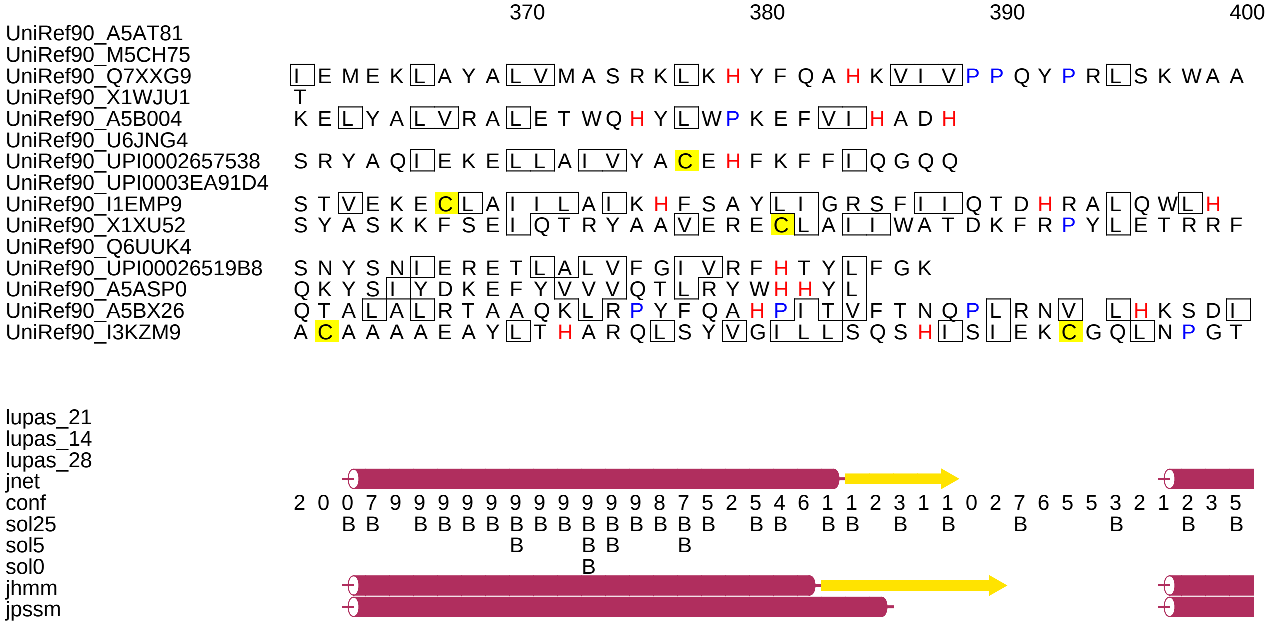

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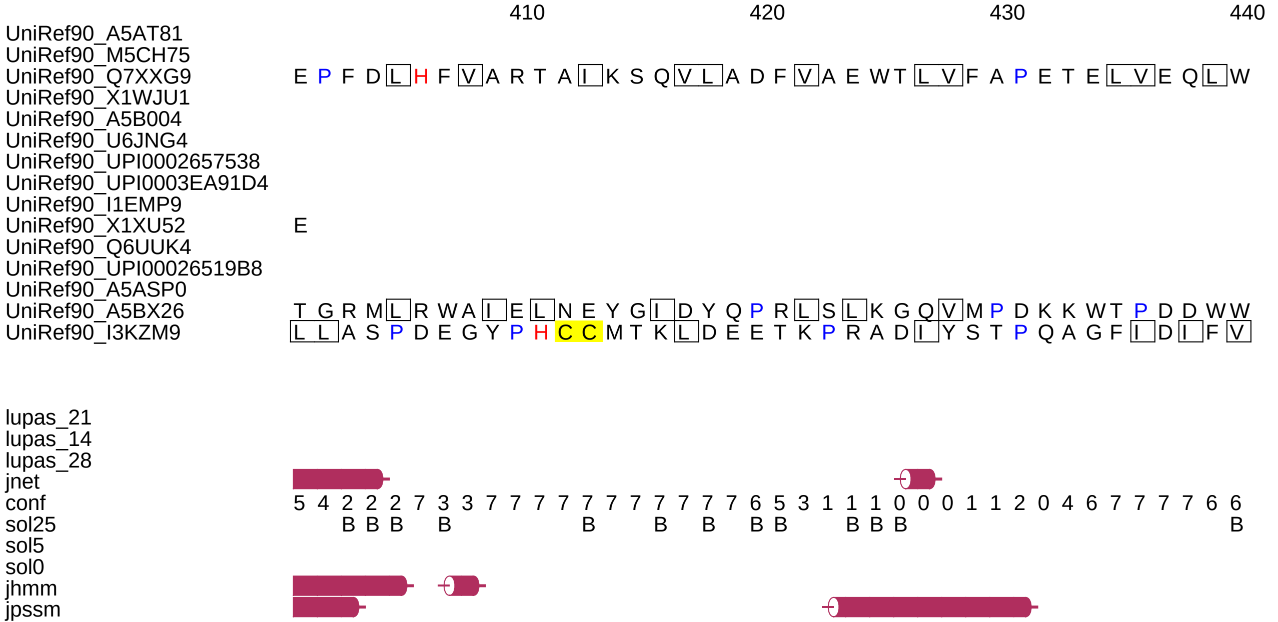

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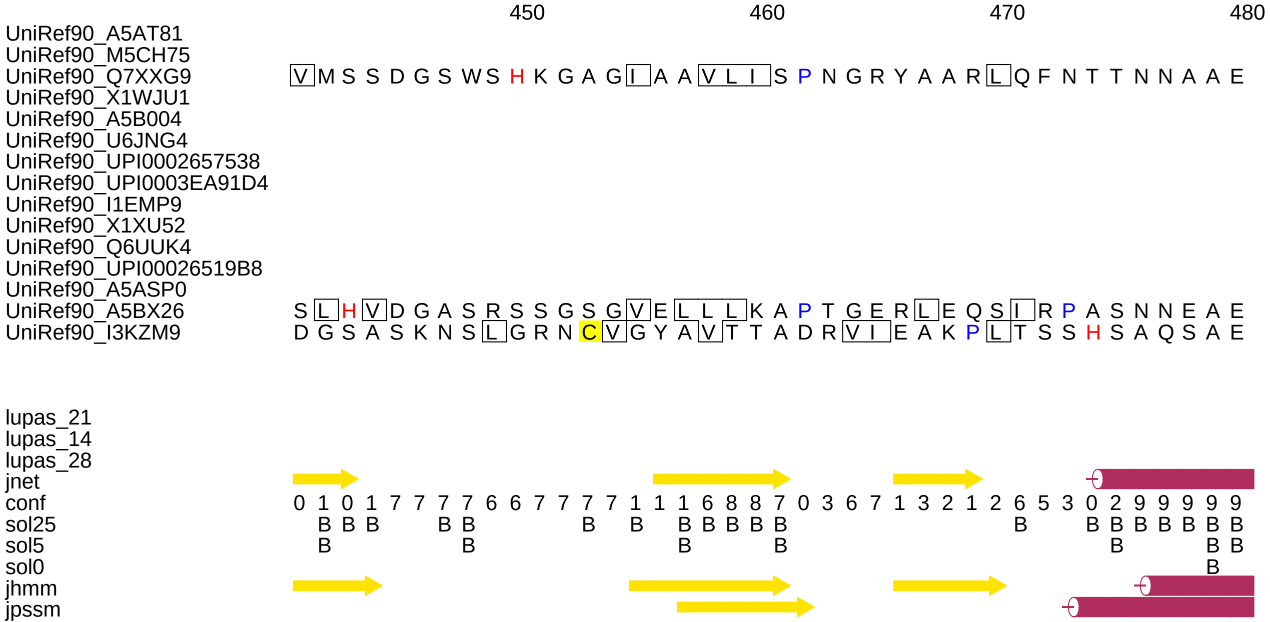450
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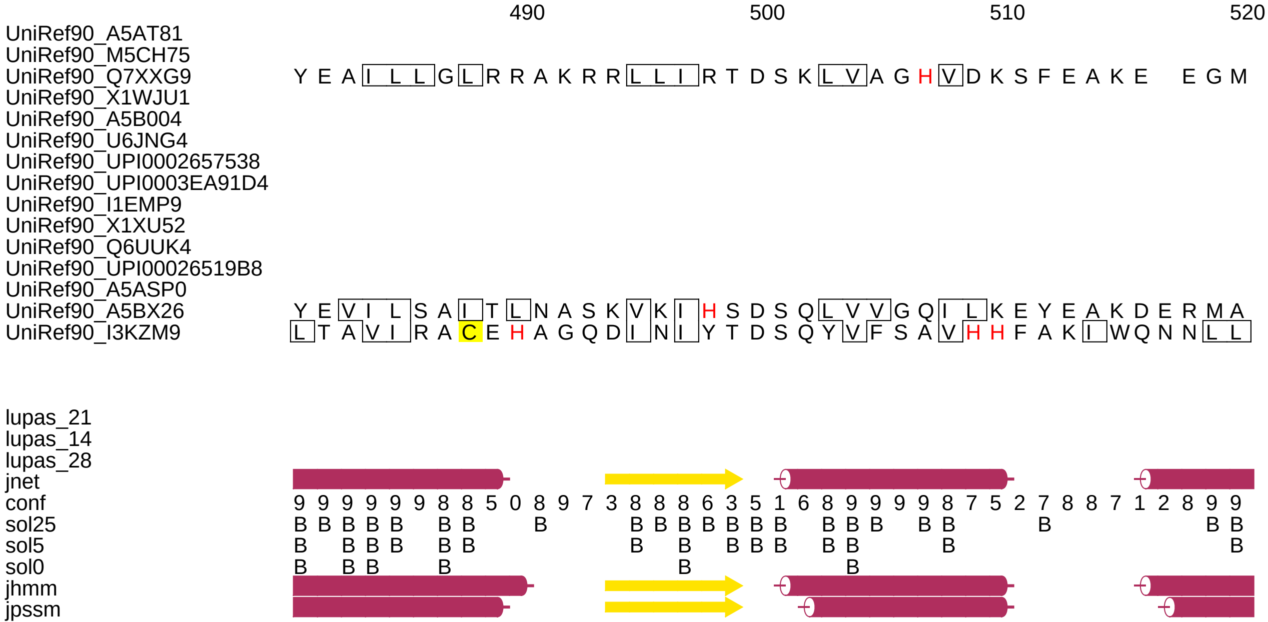
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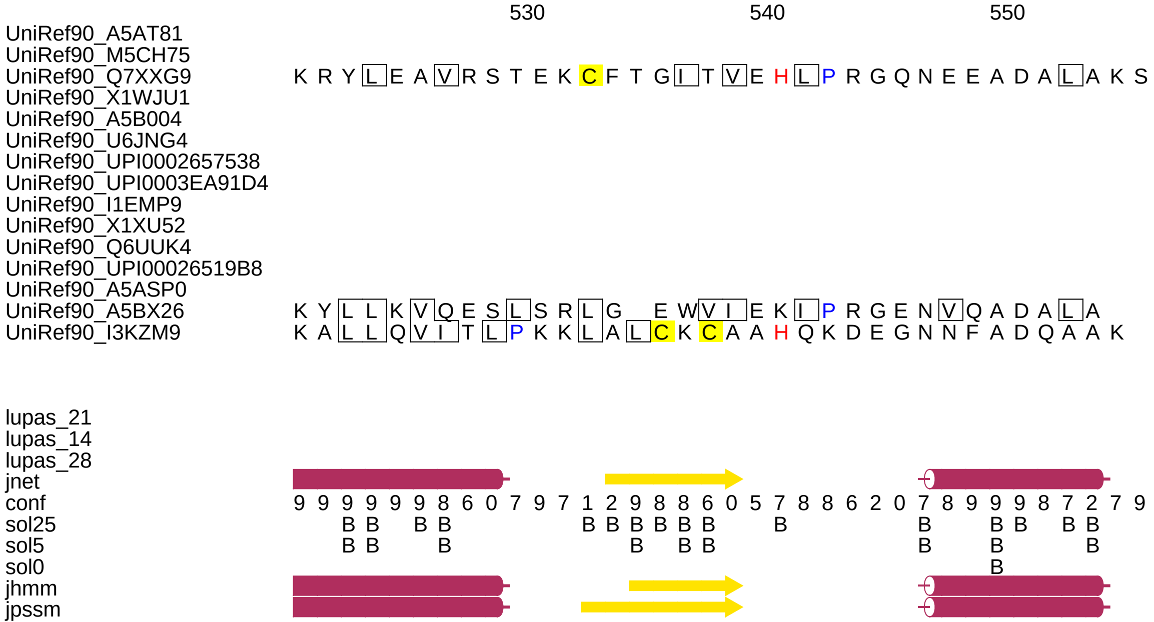

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UniRef90_I3KZM9         K A L L Q V I T L P K K L A L C K C A A H Q K D E G N N F A D Q A A K


lupas_21
lupas_14
lupas_28
jnet
conf                    9 9 9 9 9 9 8 6 0 7 9 7 1 2 9 8 8 6 0 5 7 8 8 6 2 0 7 8 9 9 9 8 7 2 7 9
sol25                       B B   B B           B B B B B B     B           B     B B   B B
sol5                        B B     B               B   B B                 B     B       B
sol0                                                                                  B
jhmm
jpssm
```