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                        1                 10                  20                  30                  40
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UniRef90_U7FMZ4         M K L T I S R E S L L T P L Q S I A G T M P V L S N V L L E A E D N T L T L T G
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UniRef90_UPI0003709216  M K F T I L R D D F L K P L N M V C G A V P I L S N V L L K A Q D G T L Q L T G
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UniRef90_Q0H1A9                                               T L P I L G N L L L K V S D G V L H L T G
UniRef90_B3E8N8         M N F K I D R D T F L K A L Q K V Q G S M P I L S N I L I E A Q G D N L E I I A
UniRef90_R7XSP9               T V S S N D F A H A V A Q A V T A L P V L T G V R I E I D G S T M S L L A
UniRef90_H0QWS7         M K F R V A R D D F A D A V A W V A R S L P V L G C V L I T S T D T G L S V S G
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UniRef90_UPI0003B2E5E1        S I D G D G F A R A I A Q V T E T L P L L T G V K L E I E G D T L T M L A
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                                          50                  60                  70                  80
QUERY                   T D L E M E M V A R V A L V Q P H E P G A T T V P A R K F F D I C R G L P E G A
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UniRef90_A6VR66         S D L E V E L V G H V P L D E C E   E G R I T V P A R K L M D I C K S L P D S A
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UniRef90_C6XRU5         T D L D M E A S D T   T I A H I E K P G S V T A P A Q T L F D V V R K L P D G S
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UniRef90_Q0H1A9         T D L E M E M M A G V P L V Q P H E N G E T T V P A R K F L D I W R G L P D G A
UniRef90_B3E8N8         T D L E V G L K G N Y P   A K V E K D G R I T V G A K K L Y E I V K E L P N Q E
UniRef90_R7XSP9         T D F R L S H R E T W N P Q T P D A S V A A L V P A K V L G D T A K S L T S G A
UniRef90_H0QWS7         F D Y E V S A Q E S L A   A E I A E P G T V L V S G R L L A E I T K A L P A   K
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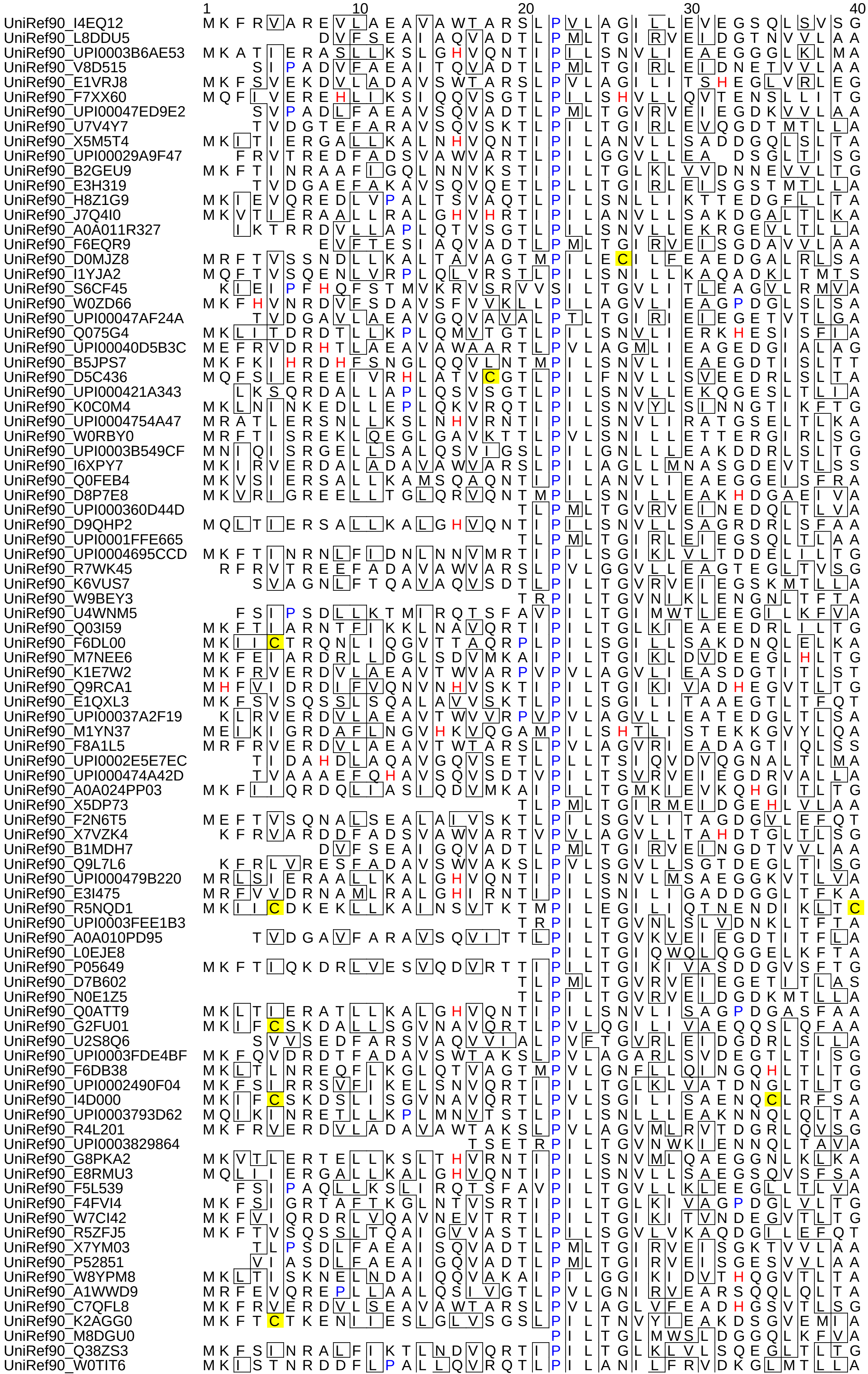

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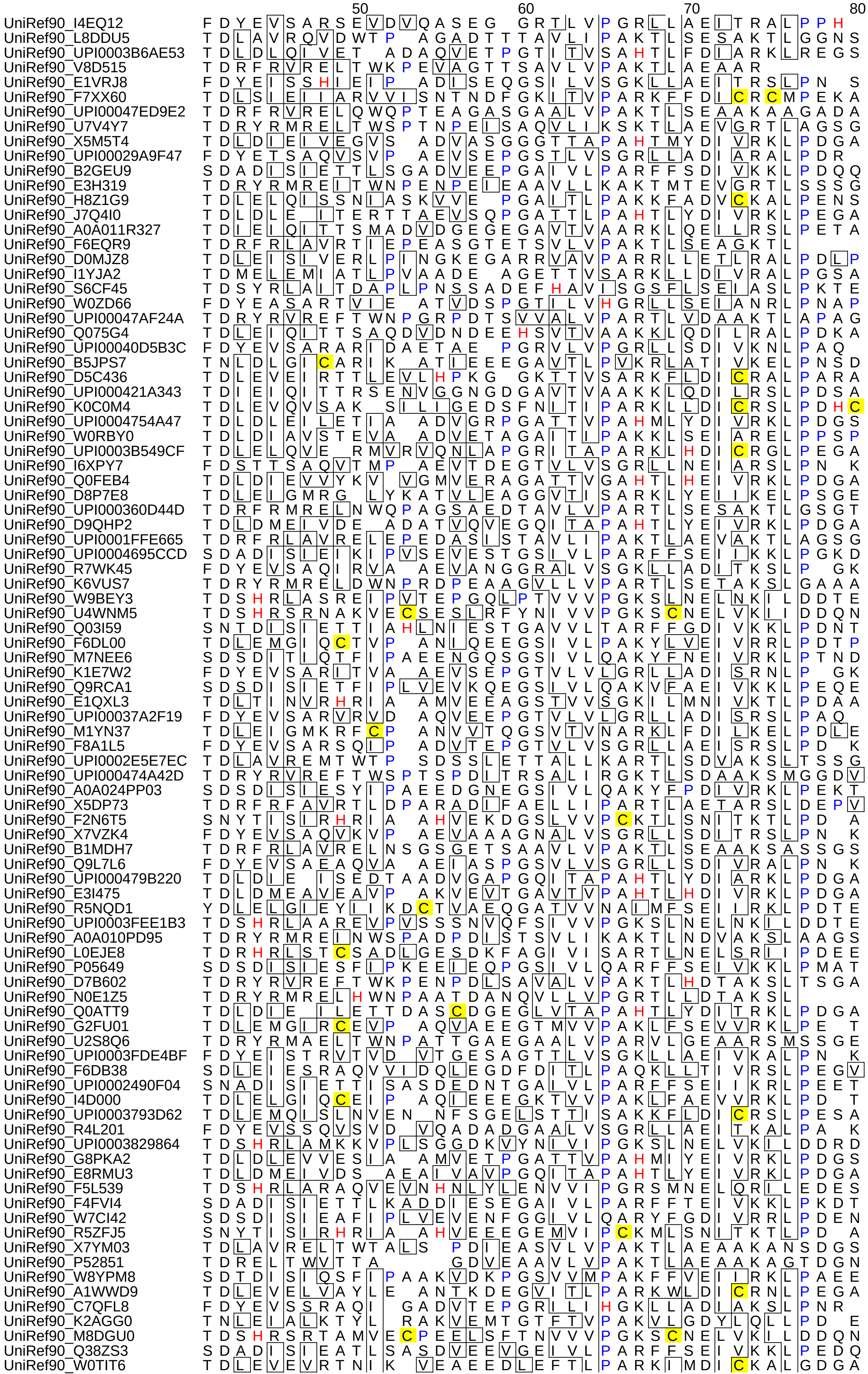

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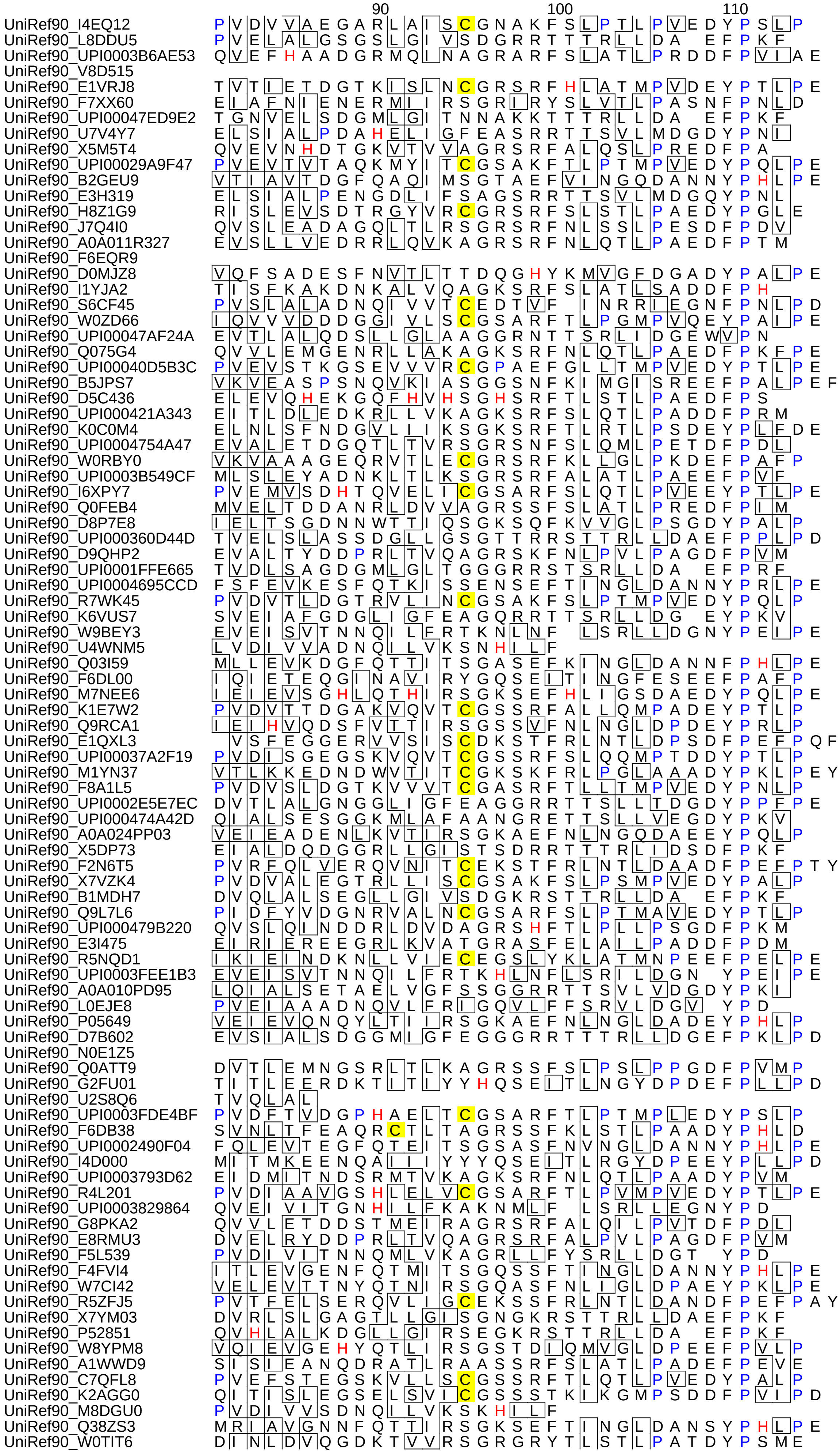

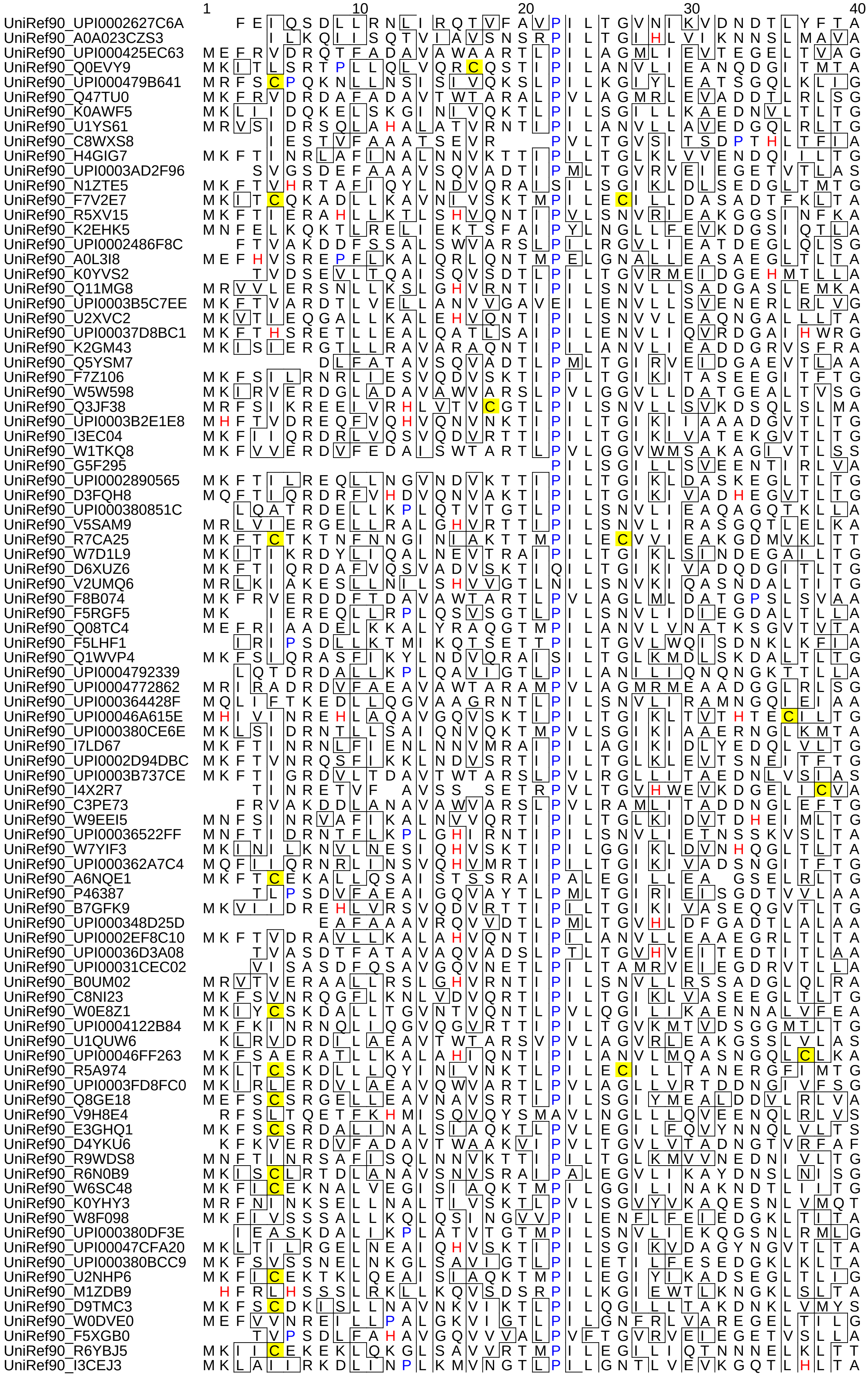
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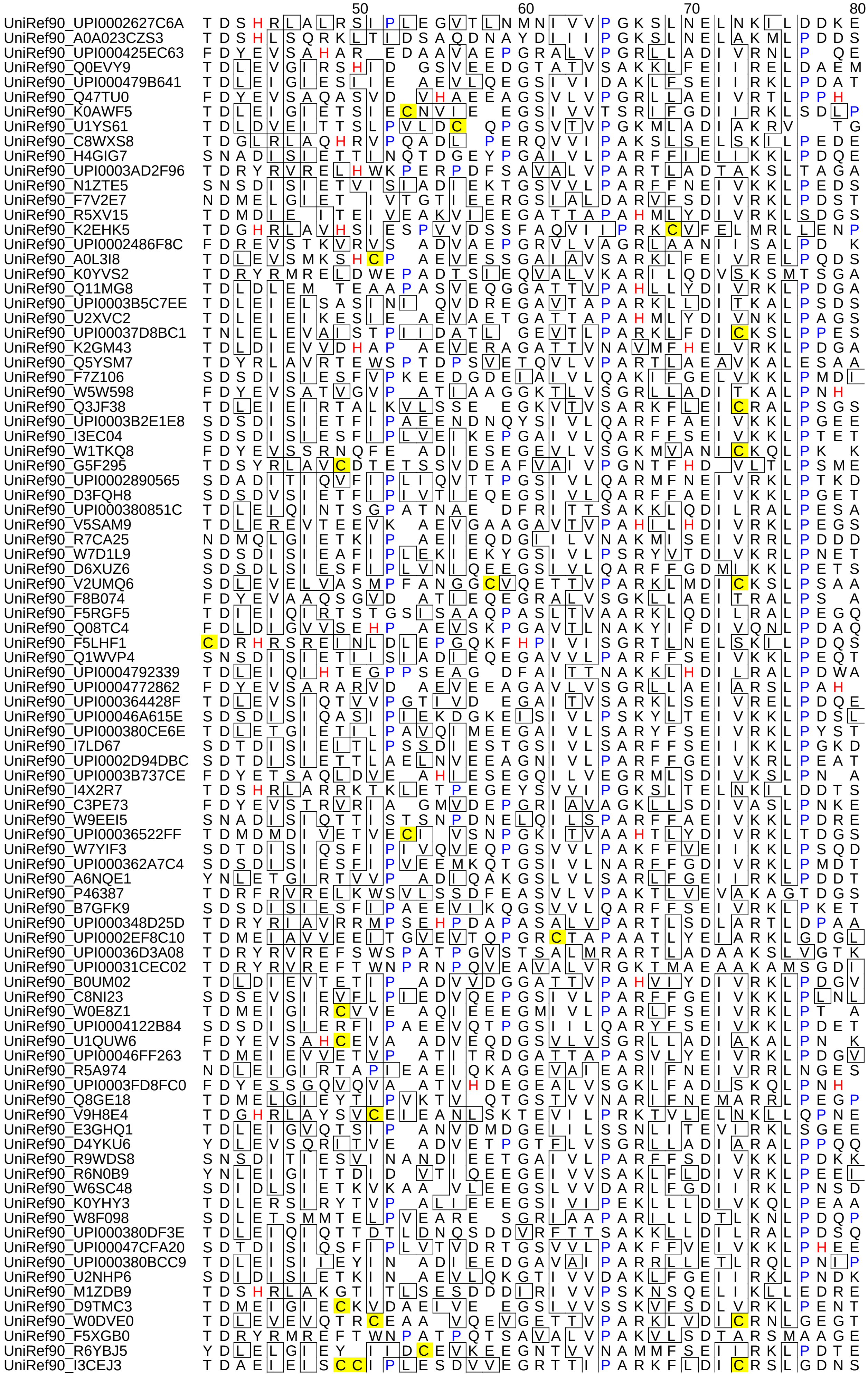

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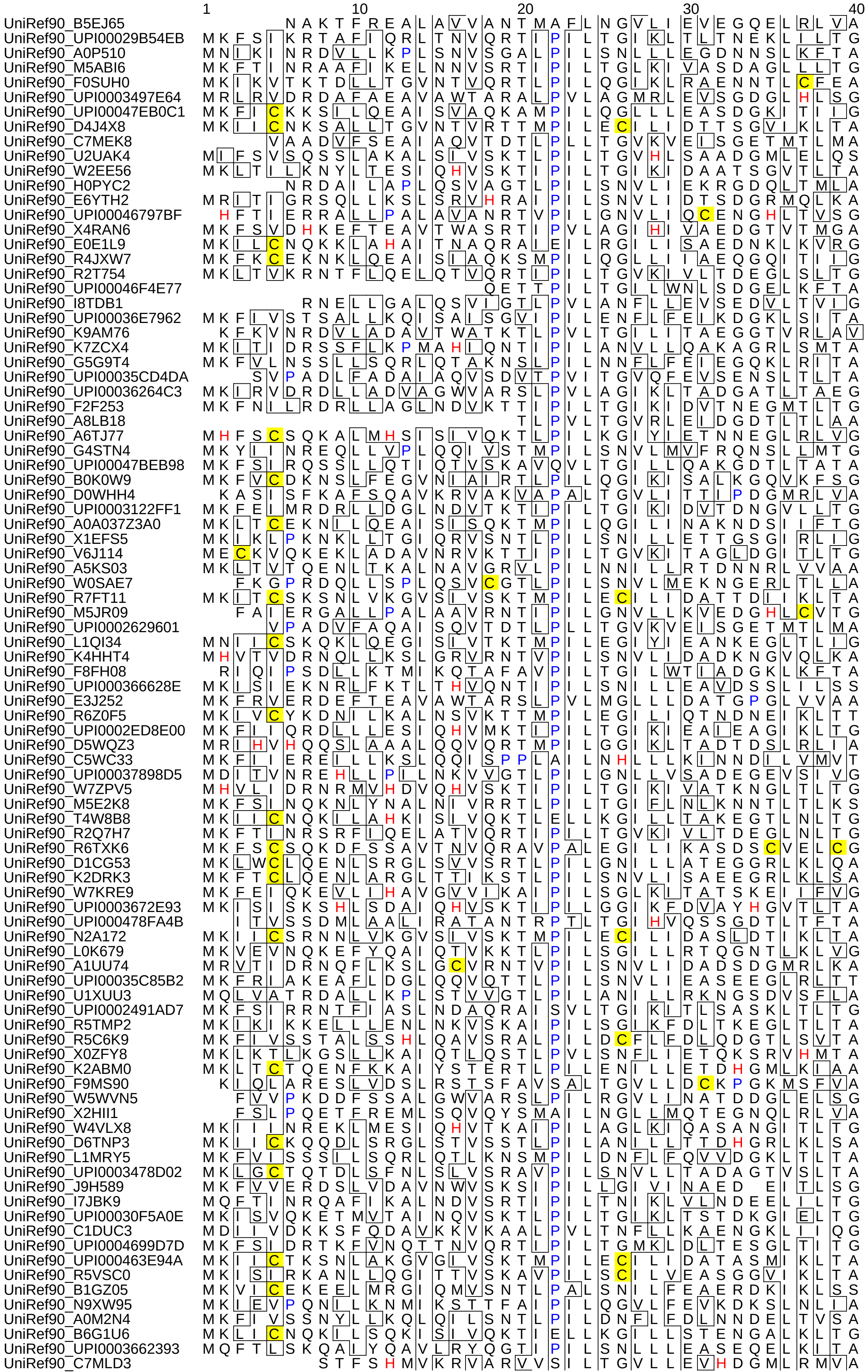

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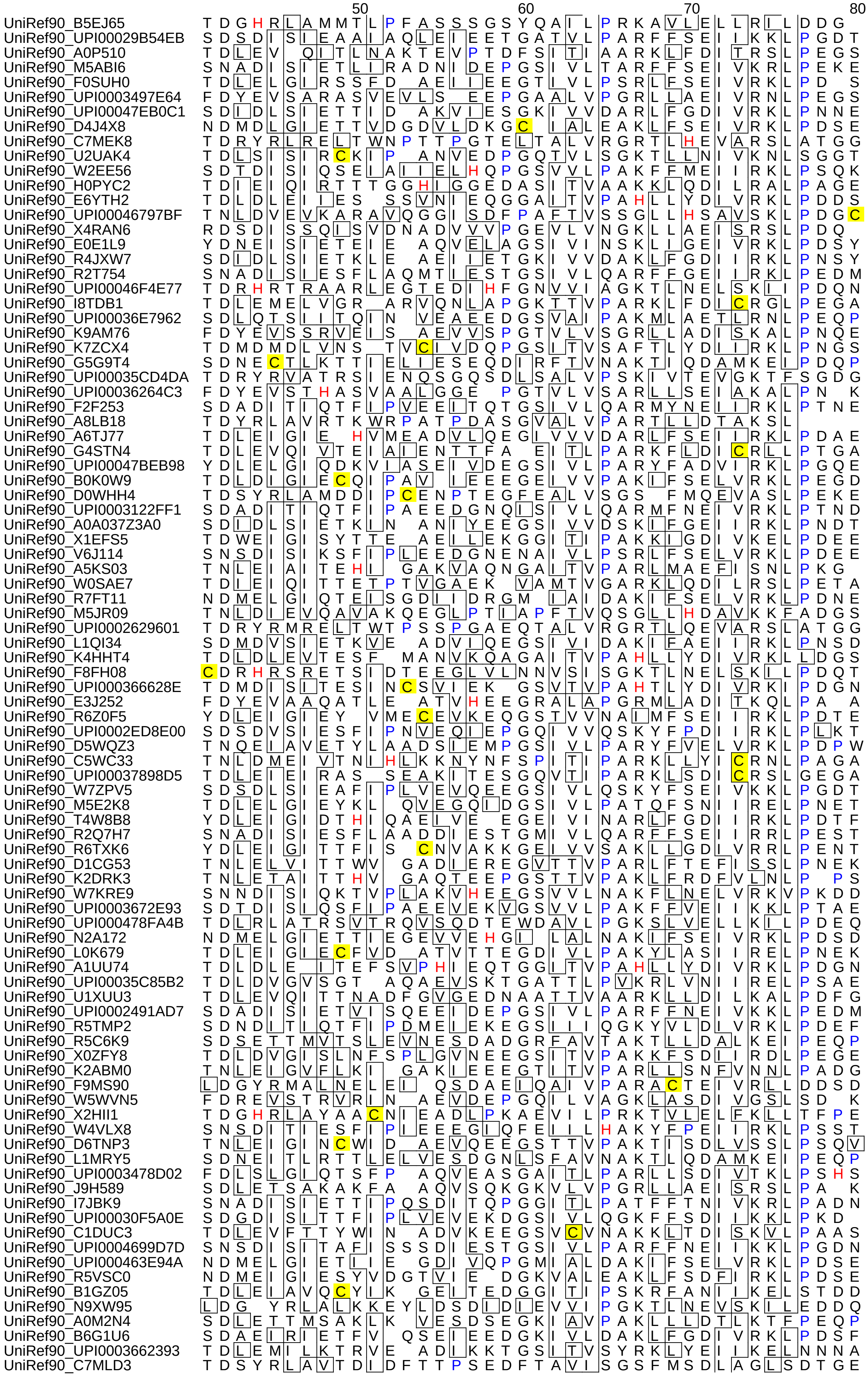

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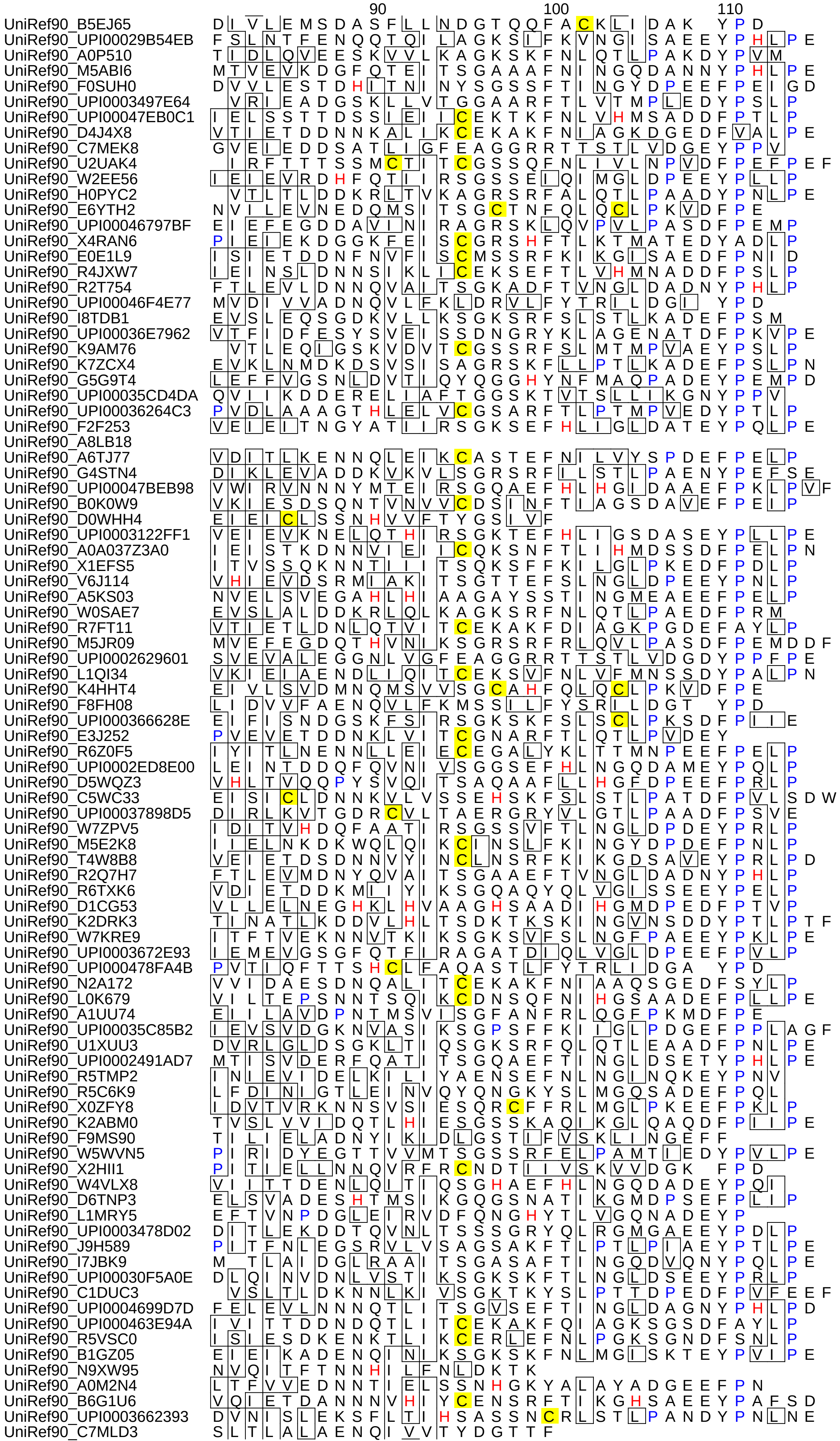

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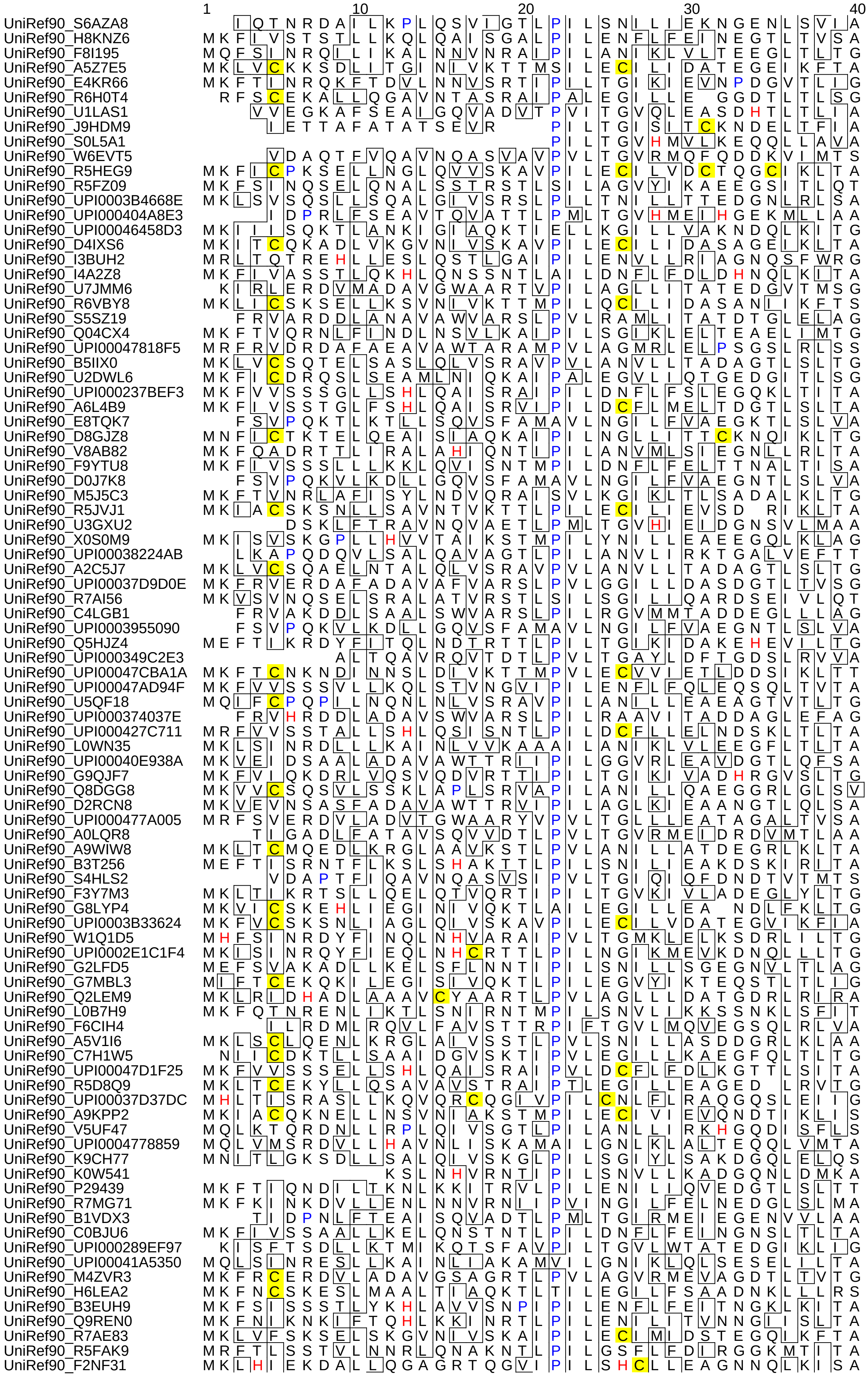

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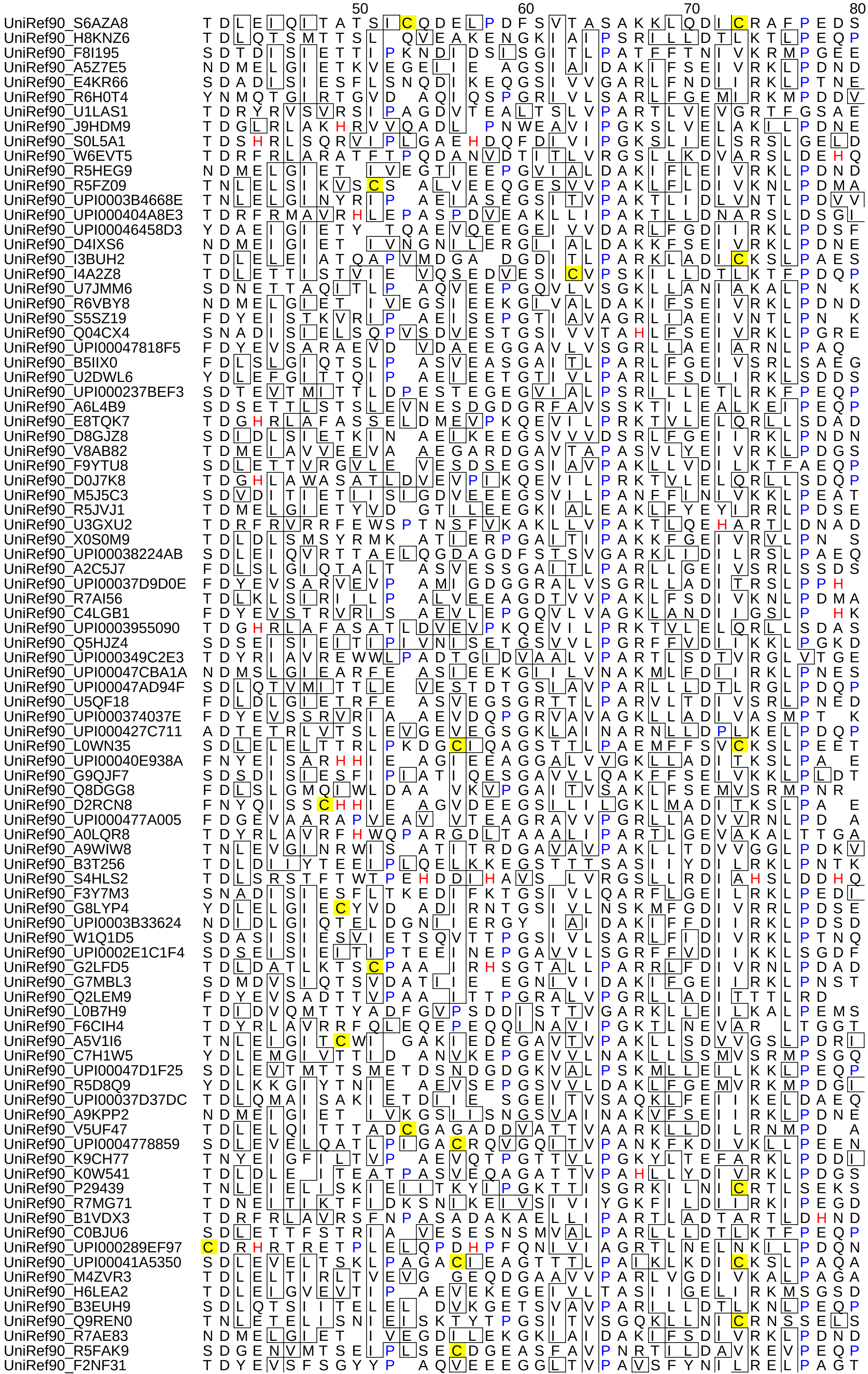

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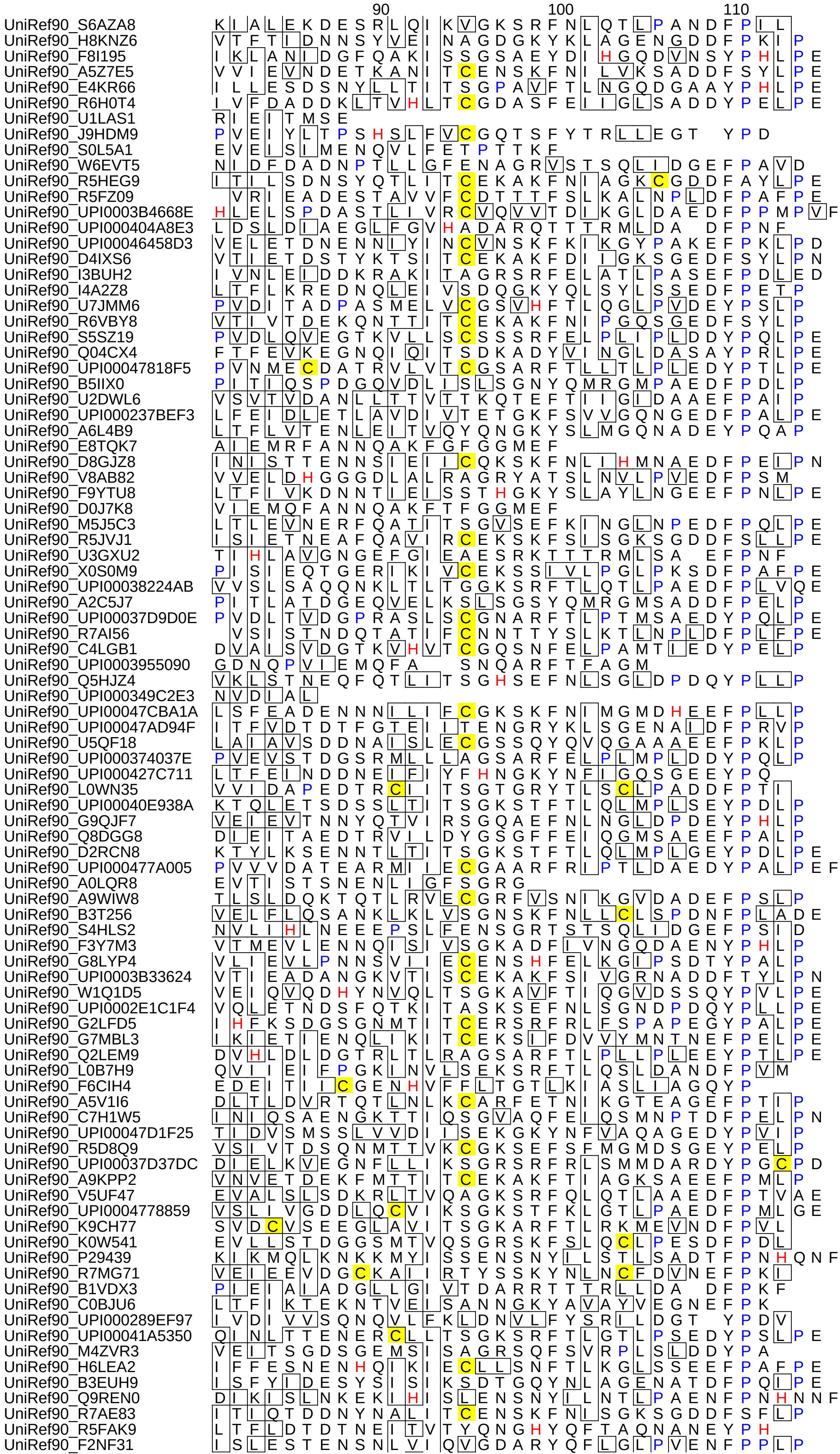

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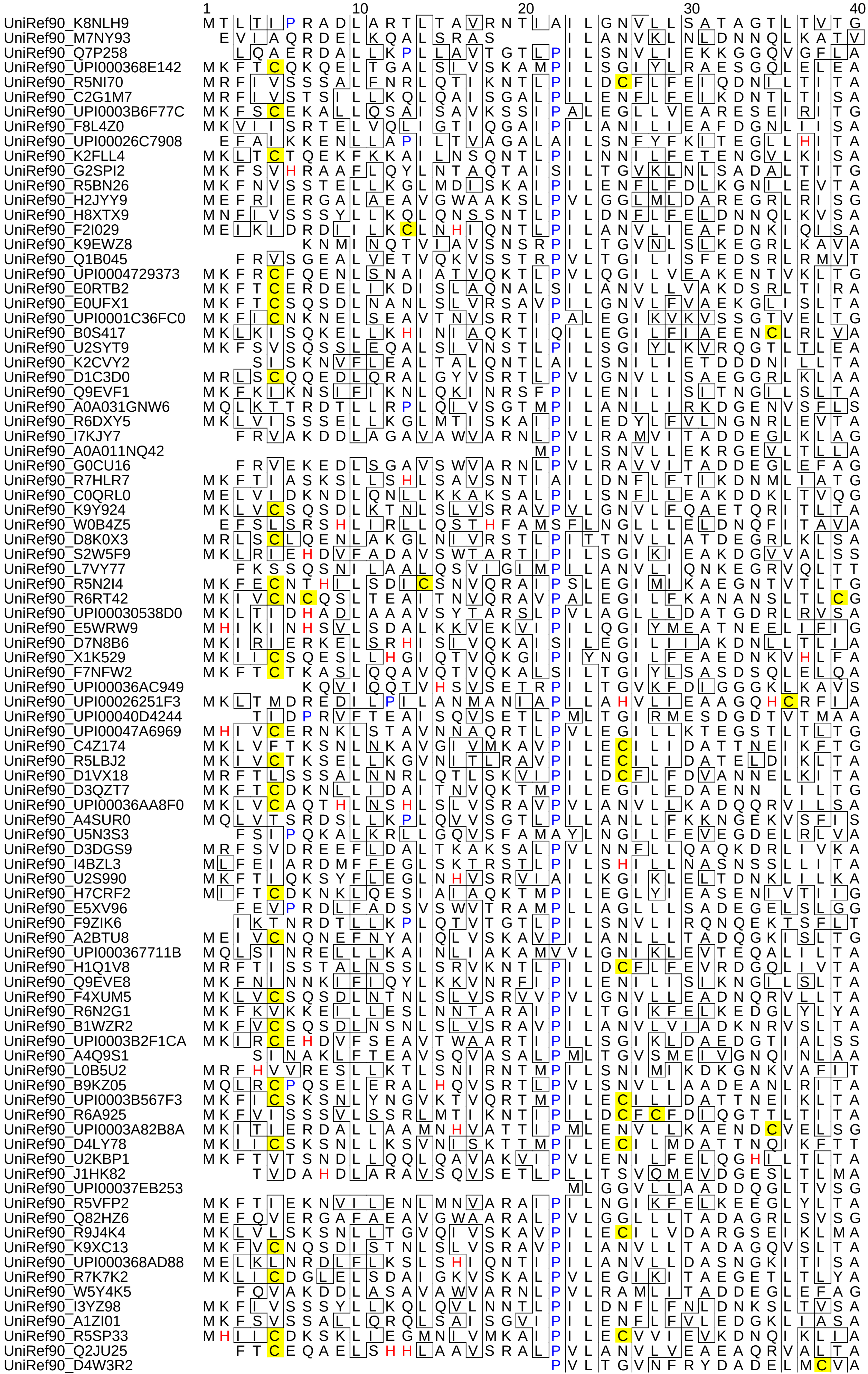

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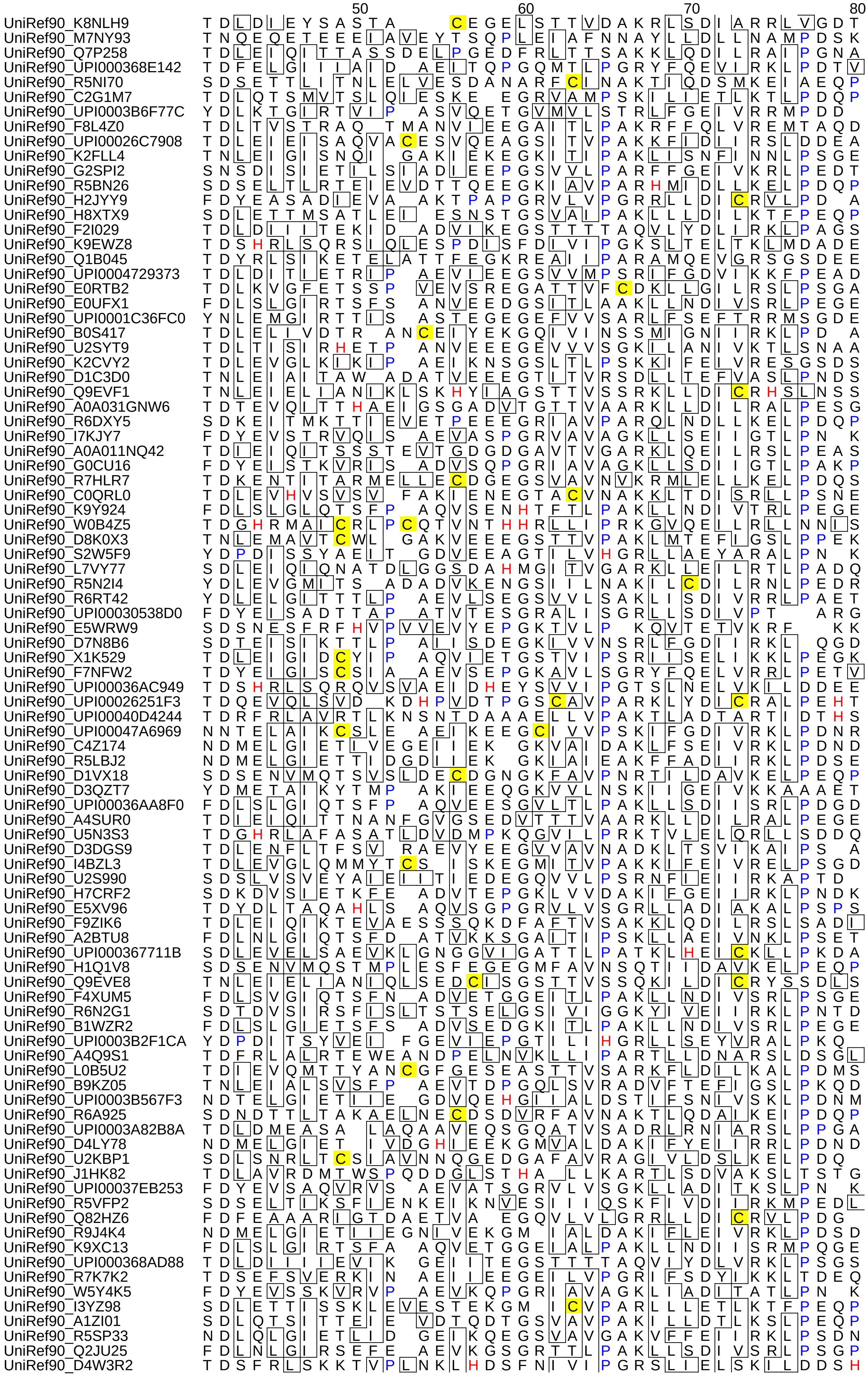

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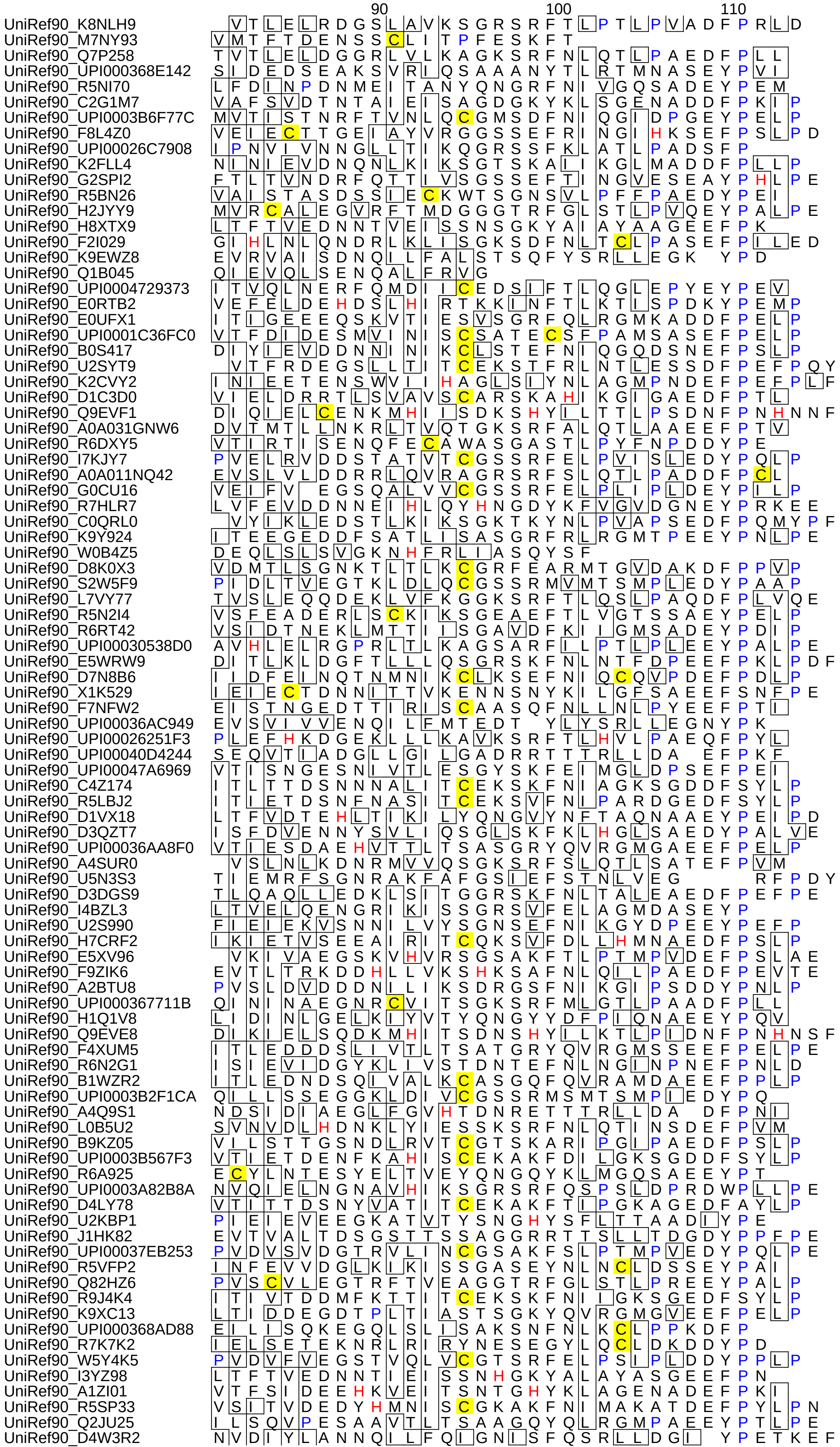

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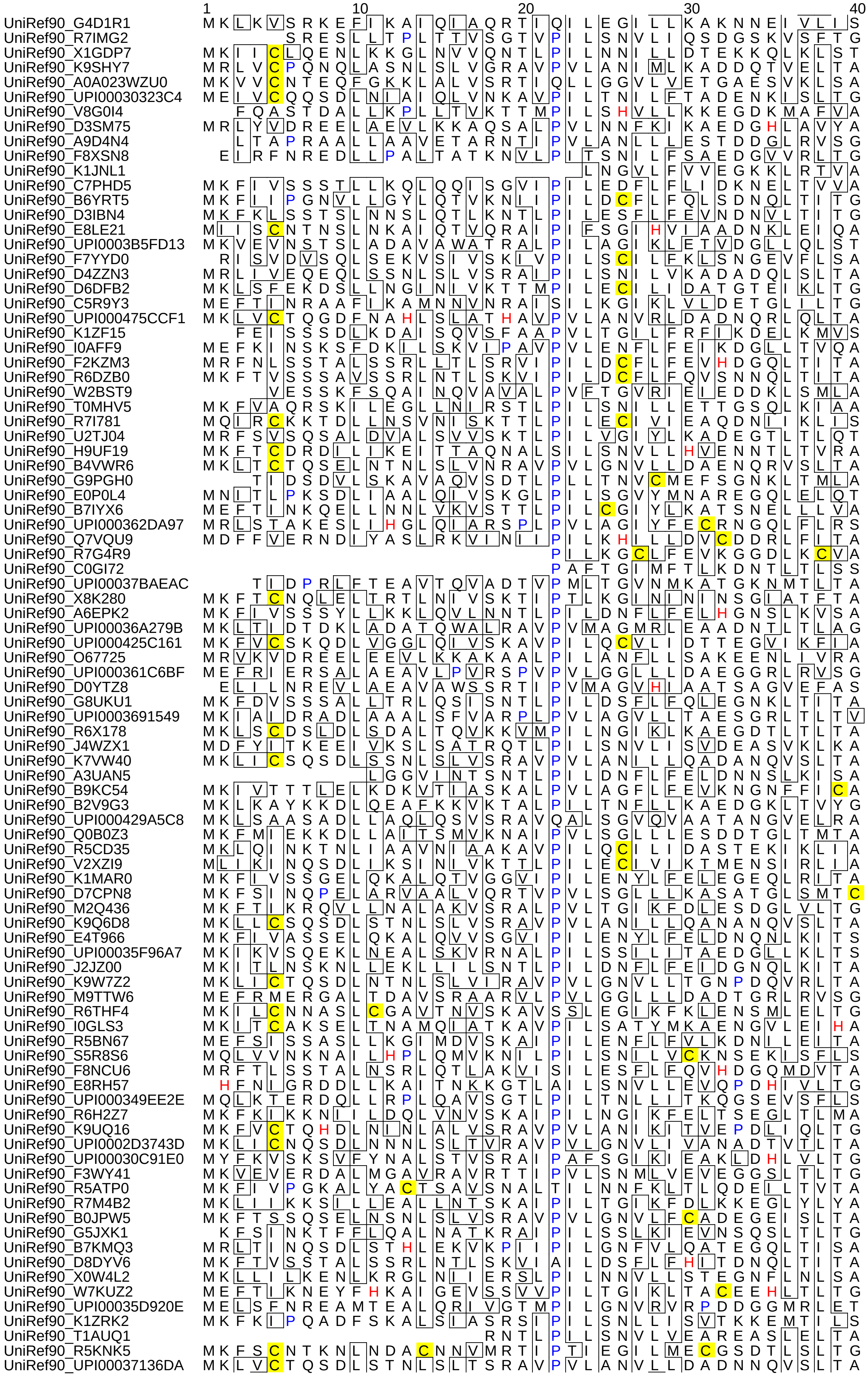

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UniRef90_S5R8S6         MQLVVNKNAILHPLQMVKNILPILSNILVCKNSEKISFLS
UniRef90_F8NCU6         MRFTLSSTALNSRLQTLAKVISILESFLFQVHDGQMDVTA
UniRef90_E8RH57          HFNIGRDDLLKAITNKKGTLAILSNVLLEVQPDHIVLTG
UniRef90_UPI000349EE2E  MQLKTERDQLLRPLQAVSGTLPILTNLLITKQGSEVSFLS
UniRef90_R6H2Z7         MKFKIKKNILLDQLVNVSKAIPILNGIKFELTSEGLTLMA
UniRef90_K9UQ16         MKFVCTQHDLNINLALVSRAVPVLANIKITVEPDLIQLTG
UniRef90_UPI0002D3743D  MKLICNQSDLNNNLSLTVRAVPVLGNVLIVANADTVTLTA
UniRef90_UPI00030C91E0  MYFKVSKSVFYNALSTVSRAIPAFSGIKIEAKLDHLVLTG
UniRef90_F3WY41         MKVEVERDALMGAVRAVRTTIPVLSNMLVEVEGGSLTLTG
UniRef90_R5ATP0         MKFIVPGKALYACTSAVSNALTILNNFKLTLQDEILTVTA
UniRef90_R7M4B2         MKLIIKKSILLEALLNTSKAIPILTGIKFDLKKEGLYLYA
UniRef90_B0JPW5         MKFTSSQSELNSNLSLVSRAVPVLGNVLFCADEGEISLTA
UniRef90_G5JXK1          KFSINKTFFLQALNATKRAIPILSSLKIEVNSQSLTLTG
UniRef90_B7KMQ3         MRLTINQSDLSTHLEKVKPIIPILGNFVLQATEGQLTISA
UniRef90_D8DYV6         MKFTVSSTALSSRLNTLSKVIAILDSFLFHITDNQLTITA
UniRef90_X0W4L2         MKLLILKENLKRGLNIIERSLPILNNVLLSTEGNFLNLSA
UniRef90_W7KUZ2         MEFTIKNEYFHKAIGEVSSVVPILTGIKLTACEEHLTLTG
UniRef90_UPI00035D920E  MELSFNREAMTEALQRIVGTMPILGNVRVRPDDGGMRLET
UniRef90_K1ZRK2         MKFKIPQADFSKALSIASRSIPILSNLLISVTKKEMTILS
UniRef90_T1AUQ1                          RNTLPILSNVLVEAREASLELTA
UniRef90_R5KNK5         MKFSCNTKNLNDACNNVMRTIPTIEGILMECGSDTLSLTG
UniRef90_UPI00037136DA  MKLVCTQSDLSTNLSLTSRAVPVLANVLLDADNNQVSLTA
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UniRef90_R7IMG2         S N L E I Q I K T H A E L E Q E G D P V A F T V S S R K I Q D L I K S L P P T E
UniRef90_X1GDP7         T D L E I A I T D Y I S   C K V E K E G S V T I P A K V L V N F I N N L P N K K
UniRef90_K9SHY7         F D L N L G I R V N F A   A T V T E P G S I T L P A R L F S D I V S R L P D E D
UniRef90_A0A023WZU0     T D V D I S I R T S S P   A E V E E E G R V V I P A R I F N D V V R S L P G G Q
UniRef90_UPI00030323C4  F D L N L G I Q T S F D   A N V D K S G A I T I P S K I L S E I V S K L P N E S
UniRef90_V8G0I4         N D M L I Q I T T H A N F G V G D D V E A V T V A A R K L Q D I L R A L P A A G
UniRef90_D3SM75         T D L E N F L F L H L P   A R V E E E G T L A V N A K K F T E V I R S L   T S A
UniRef90_A9D4N4         T D L D V T T V A T G L D A E P R Q Y A G V T L P A H L L H D I L R K L P D K A
UniRef90_F8XSN8         S D M E V S V E T T I P V D A G Y A P     A T L P A K K L L D I L R S L P E E A
UniRef90_K1JNL1         T D T H R L A C C E V D V D D E N T P M Q A I I P R K T V R E L I R L L P D D T
UniRef90_C7PHD5         T D L E T V M K V K L E   V E A K E S G R I C I P A K I L M D S L K N L P D Q P
UniRef90_B6YRT5         A D A E T R I T T T S E V L N A E G E G K F A I P S K N L L D A L R E L P D Q P
UniRef90_D3IBN4         S D N E N V M R T T L P L L E S D G D G V I A I P S R T T L D V V K E L P E Q P
UniRef90_E8LE21         M D L N M A I S C T I D   A E I S E S G E I V V S A K H F A D L I R K L P A E S
UniRef90_UPI0003B5FD13  F S L T M T A R D R I E   A G V D E D G T V V V R G K M L S D I S R M L P   G E
UniRef90_F7YYD0         T D L E S G I K A R L   R C E S E G E G K F A V D A K V L N E I V R T L P D E T
UniRef90_D4ZZN3         F D L S M G I N A S F P   A Q V Q Q G G V L T L P A K L L N D I V S R L P G D I
UniRef90_D6DFB2         N D M E L G I E T Q V E G L I L E   R G K V A L D A K L F S D I I R K L S E S P
UniRef90_C5R9Y3         S N T D I S I E I L I P A N D D E E P G A I V L P A T F F S N I V K R L P G E T
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UniRef90_K1ZF15         T D S Y R L S E K T I K L T S V K T D I D C I I P A K T V I E L G K I I P S K D
UniRef90_I0AFF9         T D L E I S L K S S Q N V A   A D S N A K M V V Q A K L L H D V V R S L P D I Q
UniRef90_F2KZM3         S D S E N I M R G T L N L E N C E G E G D F A V N N H T I L D A V K E L P E Q P
UniRef90_R6DZB0         S D S S N M M Q A I V E L T E C D G E G E F A L P H R T M L D A M K E L P E Q P
UniRef90_W2BST9         T D R Y R M A E M T W N P S K T Q I E G S A L V P A R V L S E V S R S L T G G E
UniRef90_T0MHV5         T D L D M S M M S Y L P V A   V S K K G S I T I P G K T F V D I I R E A Q E G E
UniRef90_R7I781         N N Q E L G I E T   I V K G E I I E N G S I A I N A K L F S E I I R K L P D S D
UniRef90_U2TJ04         T D L T I S I R H N I P   A N V E E P G E T V V S G K M L A S I V K N L P D A A
UniRef90_H9UF19         T D L K V S F E T K L P   V D A A D A G A T T V F C D K F L G I L R S M P A G T
UniRef90_B4VWR6         F D L S L G L Q T S F N   A N V E A D G A I A I P A K L F N D I V S R L P E G D
UniRef90_G9PGH0         T D R Y R L A M R E V E W N P A K P L D A V V L K A R T L A D V A K S L V S G A
UniRef90_E0P0L4         T N Y E L G F I V T I P   A E I H G T G T A V L P G K Y L T E F A R K L P A E E
UniRef90_B7IYX6         S N K E D T I V S T I S E T N I V Q E G E V V V P   K T I T D I V K K L P D D T
UniRef90_UPI000362DA97  T D L D F S V Q C V V P   A Q V L E E G A T V I P A K Y I T D F T R L L P E G R
UniRef90_Q7VQU9         T D L E I E I V A E I L L D K K Y I V N S V T V P G Y K F F E I C Q N L P E N S
UniRef90_R7G4R9         L D G F R M A V A K V P L I S A S G D F K M I I P S R A L G E I S R M L E E E E
UniRef90_C0GI72         S D T F R L A T T S C R V Q N Q G A D G V F L V P A K N L Q E V I R I L T N D E
UniRef90_UPI00037BAEAC  T D R F R L A L R T V E P A S E D V E A N L L I P A K T L L D N A R T L D A H D
UniRef90_X8K280         S D M D I T I E N S M E V S N S E   D G S I V V P A K L F G D I V R K L P N N
UniRef90_A6EPK2         S D L E   S T V T S M L D V E S N E V G N V C I P A R L L L D T L K T F P E Q P
UniRef90_UPI00036A279B  Y D Y Y R S A R A R   E D C E V S E P G T L L V P G R V F T D I V K A F P K G K
UniRef90_UPI000425C161  N D M E L G I E T   I V N G N I L D R G Y V A I D A K I F F D I I R K L P D N D
UniRef90_O67725         T D L E N Y L V V S V K G E V E E E G E V C   V H S Q K L Y D I V K N L   N S A
UniRef90_UPI000361C6BF  L D Y E A S A R I E V A D A E I L R P G K V L V M G R R L L D I C K V L P E G A
UniRef90_D0YTZ8         Y D Y N V S A R V T V E P L E L I T E G T V V V D G K L L S E T A R A L P N I S
UniRef90_G8UKU1         S D V E T R L V T T V D V M N A N G S G L F A V S A K I L L E P L K E L P E Q P
UniRef90_UPI0003691549  Y D Y E A A A E T T I D   A D I S A E G A A V V H A A T L L R I V G K L P S K P
UniRef90_R6X178         T D L E L S I E K K I K   A D I F T E G E T V I L G K Y F T E Y V R K I D K E D
UniRef90_J4WZX1         T D L E S E I E T L S T I T N F K S G G Q T T A P A K K L S E L C R L L P D L S
UniRef90_K7VW40         F D L S L G I R T S F T   A E V L E G G T I A L P A K L L V D I T S R L P E G E
UniRef90_A3UAN5         S D L E T T M V S T I D   V E S D S Q G S I A V P A R L L L D T L K T F P E Q P
UniRef90_B9KC54         T D L E T G V K A S V N C A E I S G D A R F V V P G D V L Q K L V K V L P D   E
UniRef90_B2V9G3         T D L E V Y T S Y W I P   A D V E E E G S L C V N S K K I S D I S K V L   A Q N
UniRef90_UPI000429A5C8  T D M E I A L R V P L T   A E V Q S E G T V V L P A R L L L D V A R S L P D R V
UniRef90_Q0B0Z3         T D M E I G I R A S T A K I E V I E K G S V L V N A H Y F F D F I K L L P E V P
UniRef90_R5CD35         N D T E L G I E T G V E   G T I L S H G I I A V N A D I F S N I V R K L P D G
UniRef90_V2XZI9         N D M E L G I E T   I L S G E I I K E G S I A L N S R L F S E I V R K L P N N L
UniRef90_K1MAR0         S D G E T T L I T S I   V V K S E D Q G K I A V P S K L F Q D F I K T Y G E Q P
UniRef90_D7CPN8         T D L E I A L S A H T L E A N V I E E G T A L V N A R Y F A D L V R Y L P N I E
UniRef90_M2Q436         S D S D I V I Q T K V T D I N I K E T G S V V L S S R Y I F D I I R K I N A D E
UniRef90_K9Q6D8         F D L S L G I R T S F S   A E V W Q G G A I A L P A K L L L D I T S R L P E G E
UniRef90_E4T966         S D G E T T L V T S L E   V M S E D Q G K I A V P A K T F Q E L I K T F G E Q P
UniRef90_UPI00035F96A7  T D L R M T I E Q E L E E C E I E E E G R V T L R A H L F S N L L S N L P K G D
UniRef90_J2JZ00         T D L E T T I T S T L E I T S P D K   G S V A I S A R M L I D I L K T F R E Q P
UniRef90_K9W7Z2         F D L S L G I Q T S F A   A N V L Q G G E I A I P A K L L N D I V S R L P D G E
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UniRef90_S5R8S6         T D T E V Q I T T Y T A V G Y G N S S I N I I V A A R K F I D I L R S L P E T E
UniRef90_F8NCU6         S D S E N V M K T T L A L D E C D A N G E F A I P N R T I L D A V R E L P E Q P
UniRef90_E8RH57         T D L E I G L K Q R V P   A E V L E T G T L T L P A K K L F E V A R E S G S S I
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UniRef90_R6H2Z7         S D T D L T I K S F I P S D K I E S I D S I I I Q S K F L I D I I R K M P S D V
UniRef90_K9UQ16         F D L S L G I Q T N F   G A R V E K E G V L T L P A K L L N D I V A K L P S G E
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UniRef90_UPI00030C91E0  S D S D I S I Q T T I E T L Q I N D T G S I V I E A K Y I L E I V R K I D S D E
UniRef90_F3WY41         T D L D L Q V S A T V P A V G       E M K T T V D A R K L Q A A V D S L F K G K
UniRef90_R5ATP0         S D G E N F L E G R I P V G G V E G S G S V C V D A K R L V E L L R E L P D V G
UniRef90_R7M4B2         S D S D I S I R S F I E I V K I E E T G S V V I G G K Y I V E I V K K L P E S N
UniRef90_B0JPW5         F D L S L G I R T S F   R A E V V E G G K I T L P A K L L N D I V S R L G E G E
UniRef90_G5JXK1         S N G Q I S I E N T I S T E E I T N S G S I L L E A N F F I N I V S S L P D I S
UniRef90_B7KMQ3         F N L S L G V K T S L K   A E V S G L G T I T V P A K L L S G L I A S L P N Q S
UniRef90_D8DYV6         S D R E N V M Q T T I A I E N V E G T G D F C I P N H V I L D A V R E L P E Q P
UniRef90_X0W4L2         T D L E I G I R Y W   A L S Q I E K Q G K I V V P A R F L S G F I N S L P S D K
UniRef90_W7KUZ2         S N S D I V I E K V I P A S D E E T G L E I V V T S R Y L T E L I K K L P G D
UniRef90_UPI00035D920E  T D L E L A W S A H   A A G N I P A E C D T T V S V R K L L D V V K A A P G E S
UniRef90_K1ZRK2         T N L E T A T K A T T P   C K T E V E G K I T L P G K T L S E F I T Q L P E G E
UniRef90_T1AUQ1         T N L D L T I H H T L A   A T V E Q P G S V T V P A R I L S E F V S S L P E Q P
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                                          90                  100                 110
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UniRef90_R7IMG2         V T I S N Q I S Q K M E V S T E N S R F S L Q T I P A D K Y P S F P E
UniRef90_X1GDP7           I E I N I K N N T V Y L K C E N Y K S N I K G L N A K D F P I I P
UniRef90_K9SHY7         V T T L E A G E A M A A I A C G S G R Y H V N G L P I E E F P D L P
UniRef90_A0A023WZU0     L I E H D V A S G T V R L A A G E K E Y S I R A Y A A D E F P Q L P E F
UniRef90_UPI00030323C4  P V T L E E D T E N I L I K S D R G S F N L K G I A S E D Y P K L P
UniRef90_V8G0I4         Q V S A N V K D Q K M T L Q C S G S R F S L Q T L P G V D F P L L P E
UniRef90_D3SM75         E V Y L H L R E D K L V V S G G R S T F K L A V A D P E E F P E F P E
UniRef90_A9D4N4         E V S L K T D G G Q M T L T S G R S R F N L Q T L P G A D W P R L Q E
UniRef90_F8XSN8         D V V L R F D D G K A A L R S G G S R F T L A T L A A E V F P L M
UniRef90_K1JNL1         P V R V Q F T D L Q V C F S F G N I T F
UniRef90_C7PHD5         L T F I D L N S Y A V E I T S D N G K Y K V M G E N P E N F P K E P
UniRef90_B6YRT5         I T F V I N E N N E V L I Y Y E N G K Y S F I A Q N G D E Y P T
UniRef90_D3IBN4         L F D I D T N N F N V E V T Y Q N G K Y N F T A Q D G T A Y P K   P E
UniRef90_E8LE21         T I S K N E E K H S I K V S S G K S E Y Q L F L M N E D D Y P K F P T F
UniRef90_UPI0003B5FD13  K T Y L A T E G S R L R I T S G K S T F S L Q L M P V E E Y P D L P
UniRef90_F7YYD0         T A E F T L S E E S V T V T C G R S K F K I P T V D P S E F P D L E
UniRef90_D4ZZN3         E V N D E D T E A V V T L T S S S G R Y Q V R G M V A E E Y P E L P
UniRef90_D6DFB2         I I I E S D E K N N T T I S C D K S V F K I Q G K D G D E F S Y I P
UniRef90_C5R9Y3         F K L T N A S G L Q T K I T S E N A E F D I N G Q D A N N Y P H L P E
UniRef90_UPI000475CCF1  I T L E E S D T T Q T T L T S A S G H Y Q V Q G M S S E E F P E L P
UniRef90_K1ZF15         P V E I N I A S N Q V L F K S G
UniRef90_I0AFF9         L S I S T D S N S R L K L K T D K G V Y H I S Y F S P E D F P E I P
UniRef90_F2KZM3         L L N V N M E E M K I Y V T Y Q N G S Y N F P I L G A D E Y P K V
UniRef90_R6DZB0         L N F E V D M D T M M K V N Y Q N G M Y N F T A Q R A D E Y P
UniRef90_W2BST9         Q V S V A I S H S E L T G E S S G C K R E L T T L L G G E F P K V
UniRef90_T0MHV5           I A F T A T D N R L E I K L E N G S Y K I G G I P A A E F P K L P E
UniRef90_R7I781         V T F T T N D S F M A N I Q C E K A K F N L M G K A S D E F P L L P
UniRef90_U2TJ04           V N F E A T P H G L T I S C N R S N F N L Y A L E P A D F P E F P E F
UniRef90_H9UF19         A T F E D Q G N G T F Y I K N G S I D F K L K S I D A E K F P E L
UniRef90_B4VWR6         I T L E D T E S L S I T L T S T S G Q Y K M R G M N S E D F P E L P
UniRef90_G9PGH0         P I E I A L N D D D A L I G F E S G R R T T S V L S D G E Y P Q F P E
UniRef90_E0P0L4         V I N T E S S D G L A E I R S G T V R F T L R T M E V T D F P V L
UniRef90_B7IYX6         V S F T L D N N N S L H I S S G K T N Y S L N T L S A D D Y P D F
UniRef90_UPI000362DA97  I E I M V D D T N I A N I T Y G S S E F N I N C Y N P A D Y P E
UniRef90_Q7VQU9         K I H I L L Q E N R F L I S S G C S N F V L S I L P V L D F P K V
UniRef90_R7G4R9         E I T I V S E D N S L M V E E N N T V F V S R L L E G E
UniRef90_C0GI72         D V Q L A V A D N Q L L I T C K N I K L S S R L L D   E N F P N I D
UniRef90_UPI00037BAEAC  P I D F V G R E G L F G I H T D N R E T T T R L L D A   E F P N V
UniRef90_X8K280         D I E F T C E D E K I T I K C L T S E F S L V G M S S D E F P N I
UniRef90_A6EPK2         L T F T L E E N N T V E I S S N H G K Y A L A Y A D G A E F P S
UniRef90_UPI00036A279B  P T T L A L D G T D L A L S C G S A H I L L P T L P L N D Y P T L P
UniRef90_UPI000425C161  V T V E S T N N I K V T I S C E K A K F S I L G R S G N D F S Y L P D
UniRef90_O67725         Y V Y L H T E G E K L V I T G G K S T Y K L P T A P A E D F P E F P E
UniRef90_UPI000361C6BF    V E C A V E G S R F T V S G D G A R F G L S V L P L D D Y P A L P
UniRef90_D0YTZ8         E V S F K T E D N Y L H I T C G S F H Q Q L L V M P E E D Y P Q L P
UniRef90_G8UKU1         L V F E I N D D N L S T I R Y E N G K Y E F I G Q R G D T Y P Q
UniRef90_UPI0003691549  V V   F E A G E R E M L I R C G S V R A S L P L M P V G E Y P Q   P T F
UniRef90_R6X178         V I I D T S G E N T L K L T Y G E N N G Y I Q T M E A D E Y P A F
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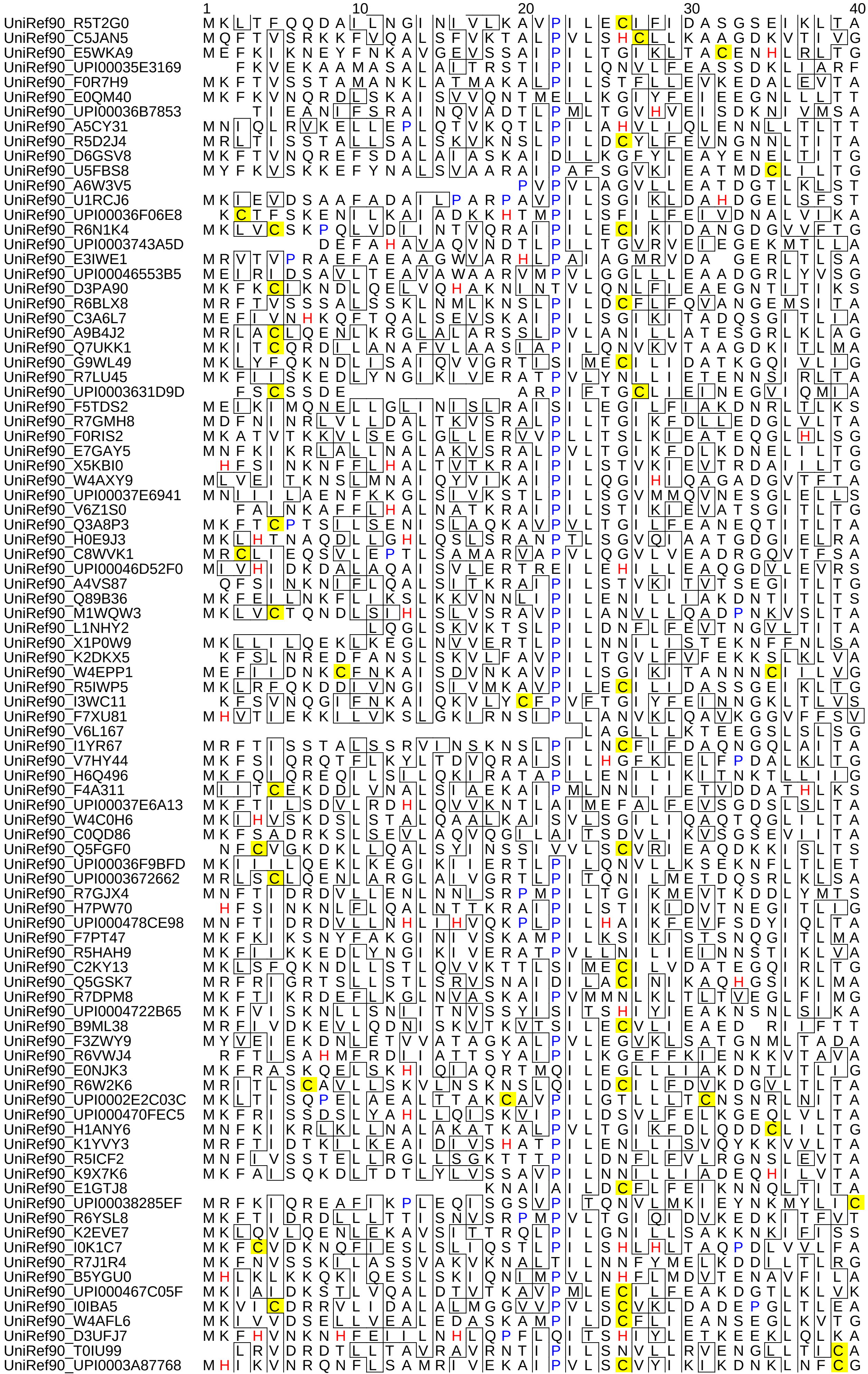

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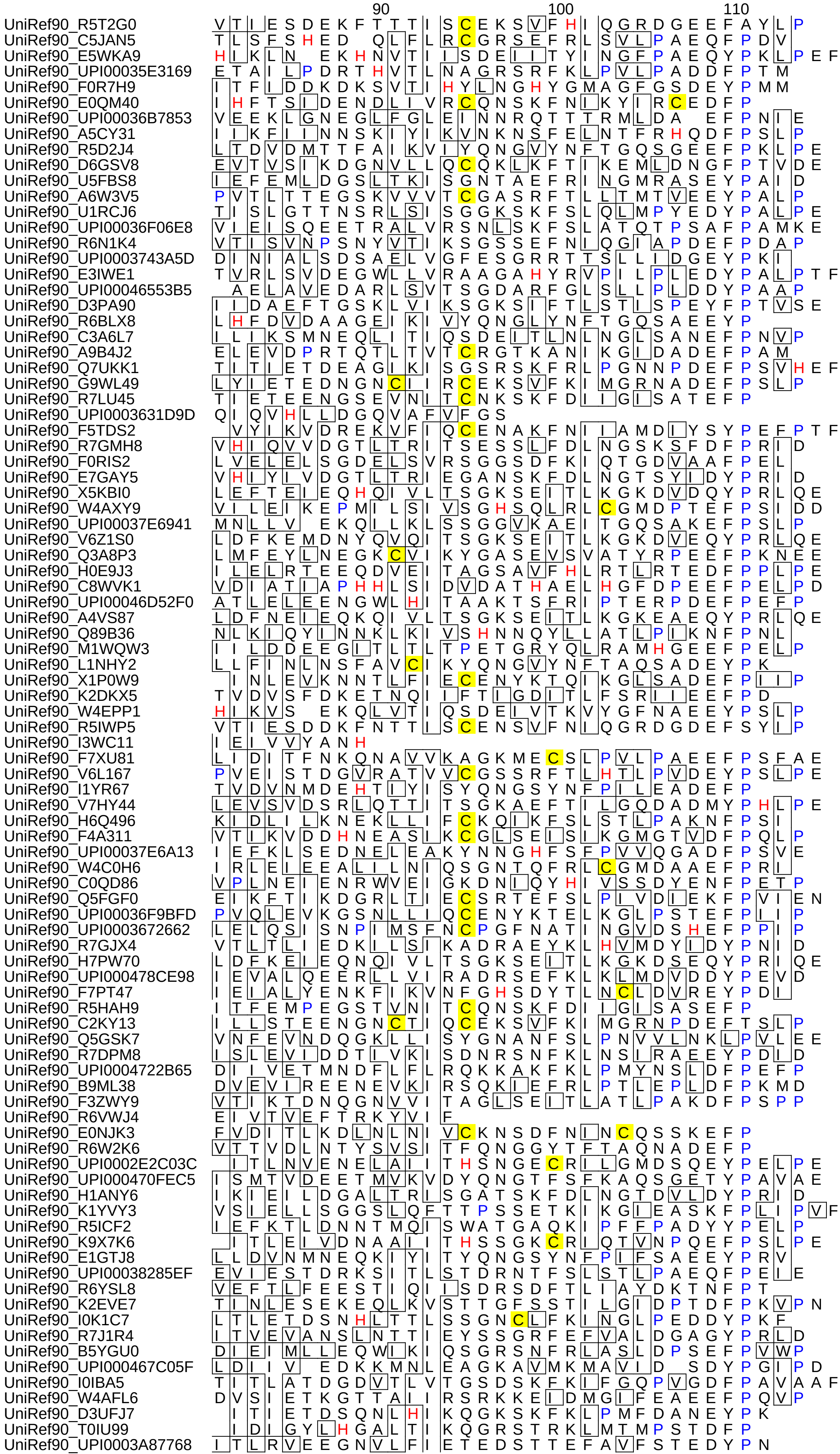

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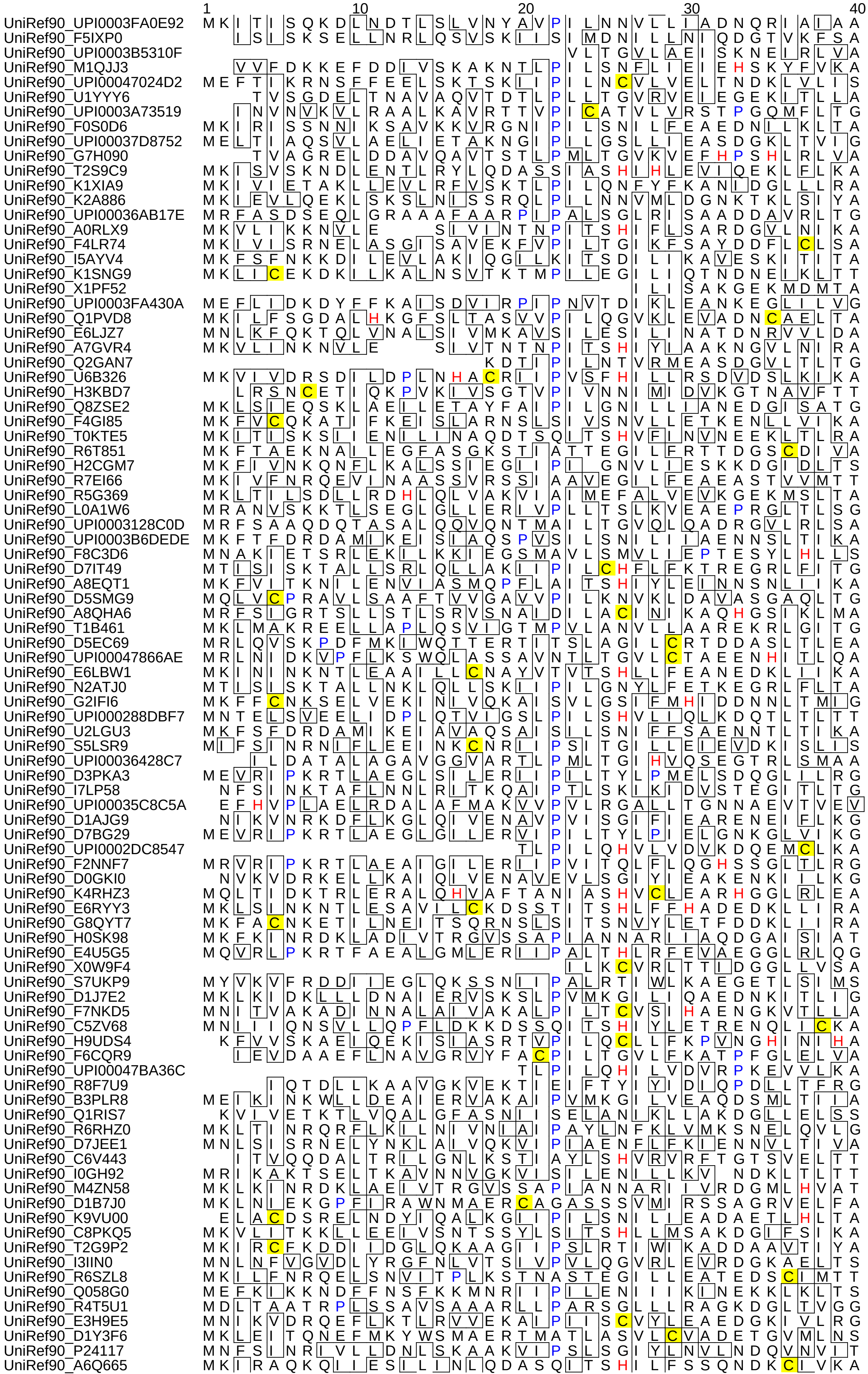
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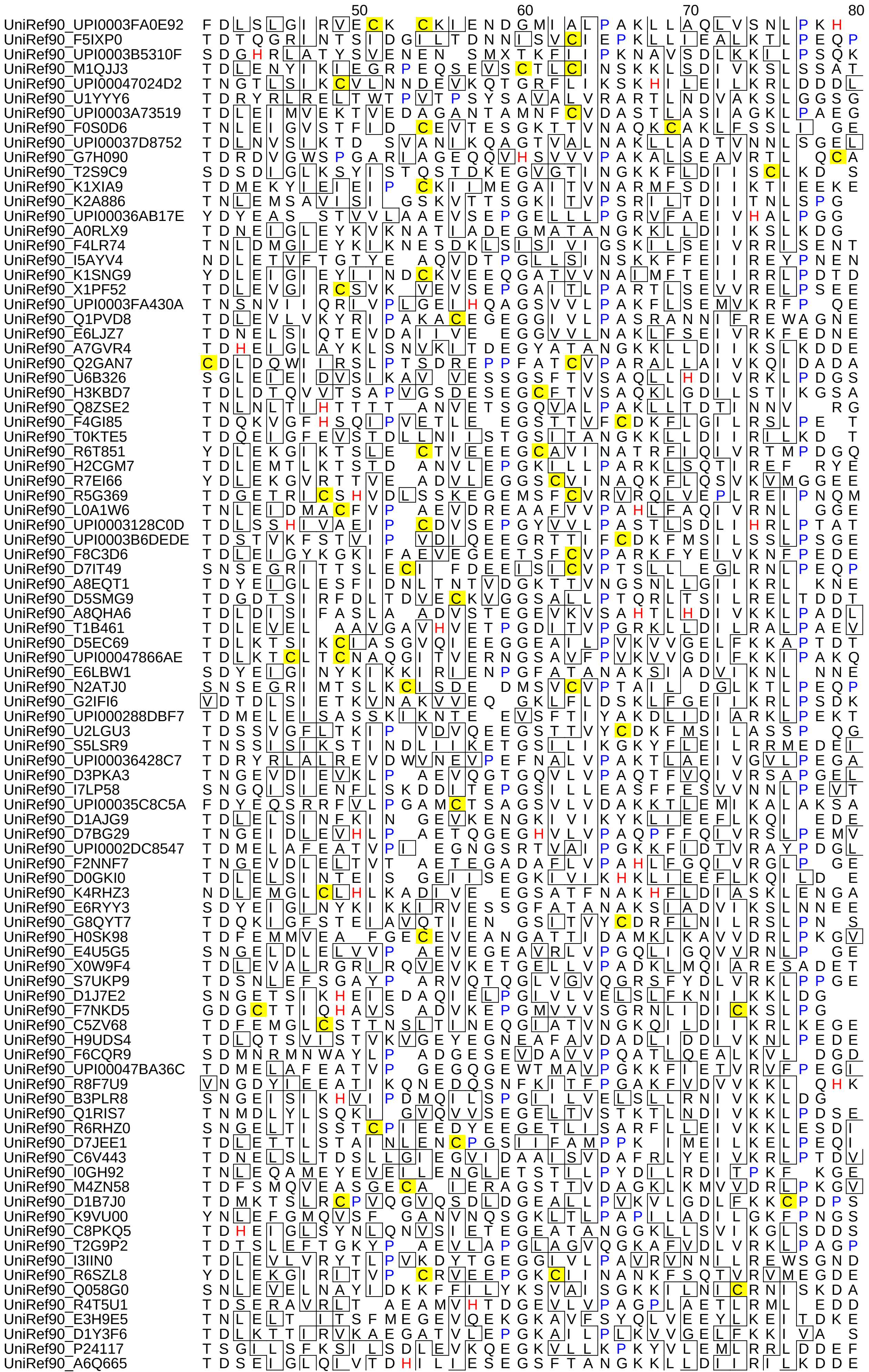
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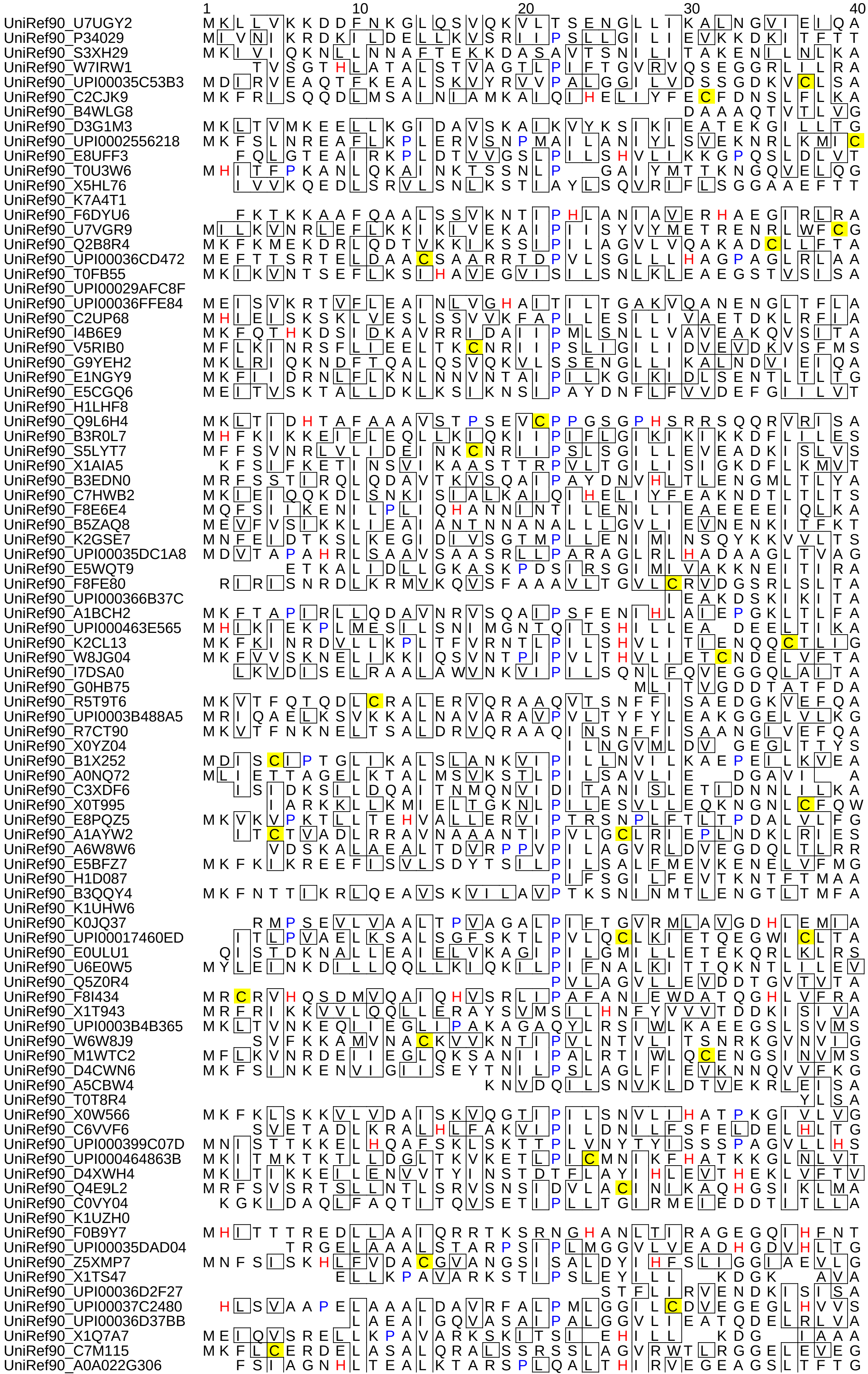

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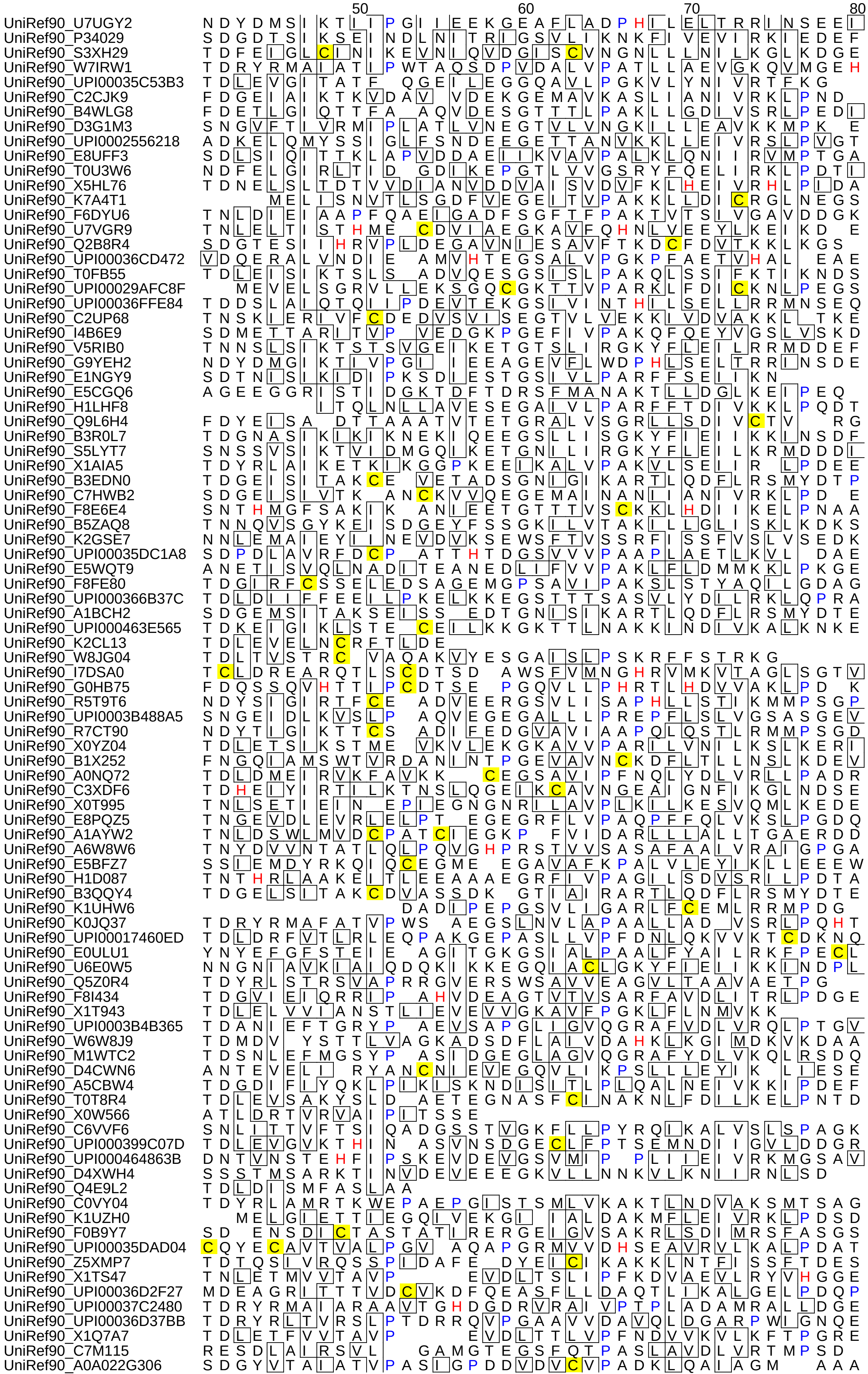

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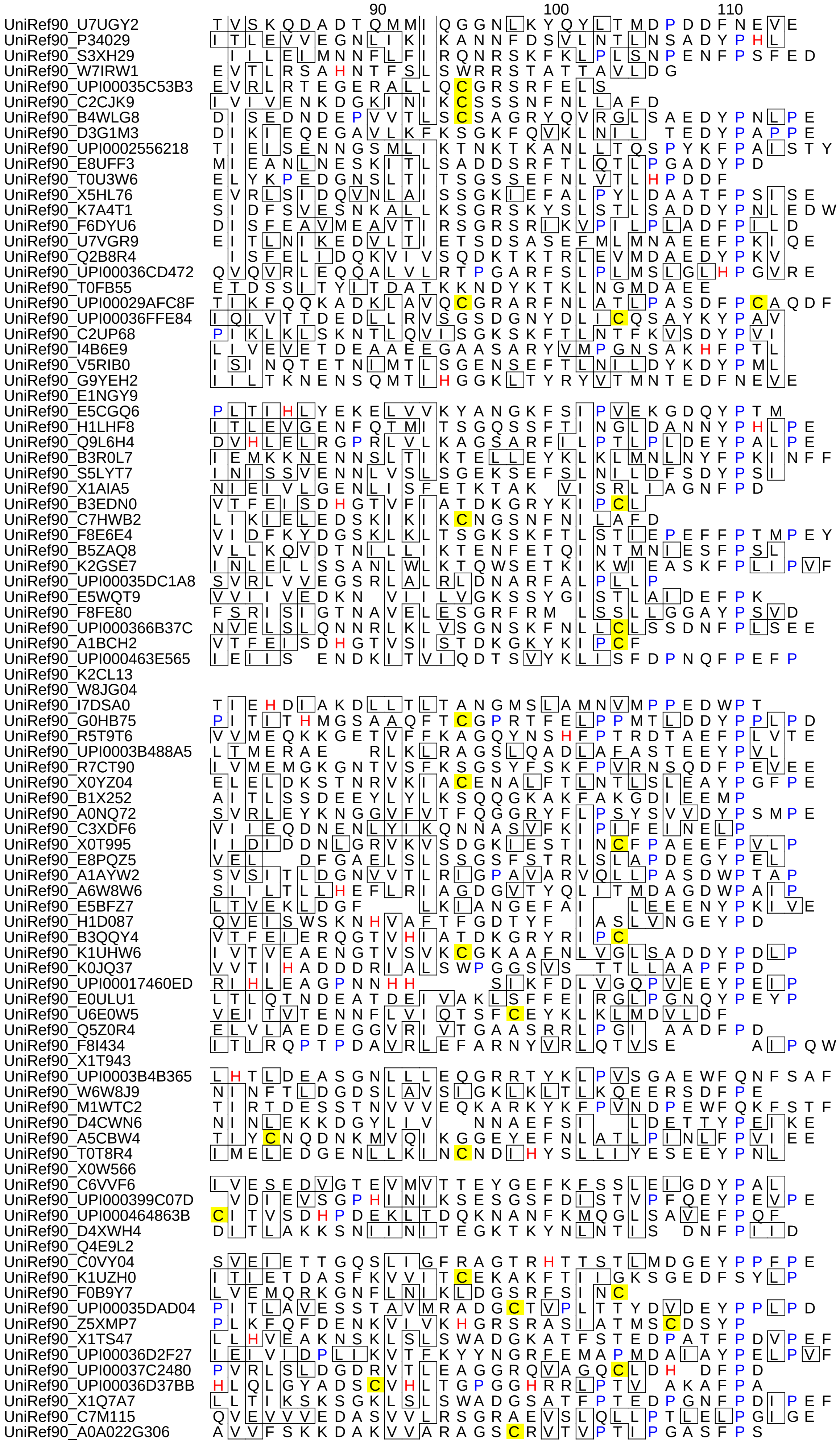

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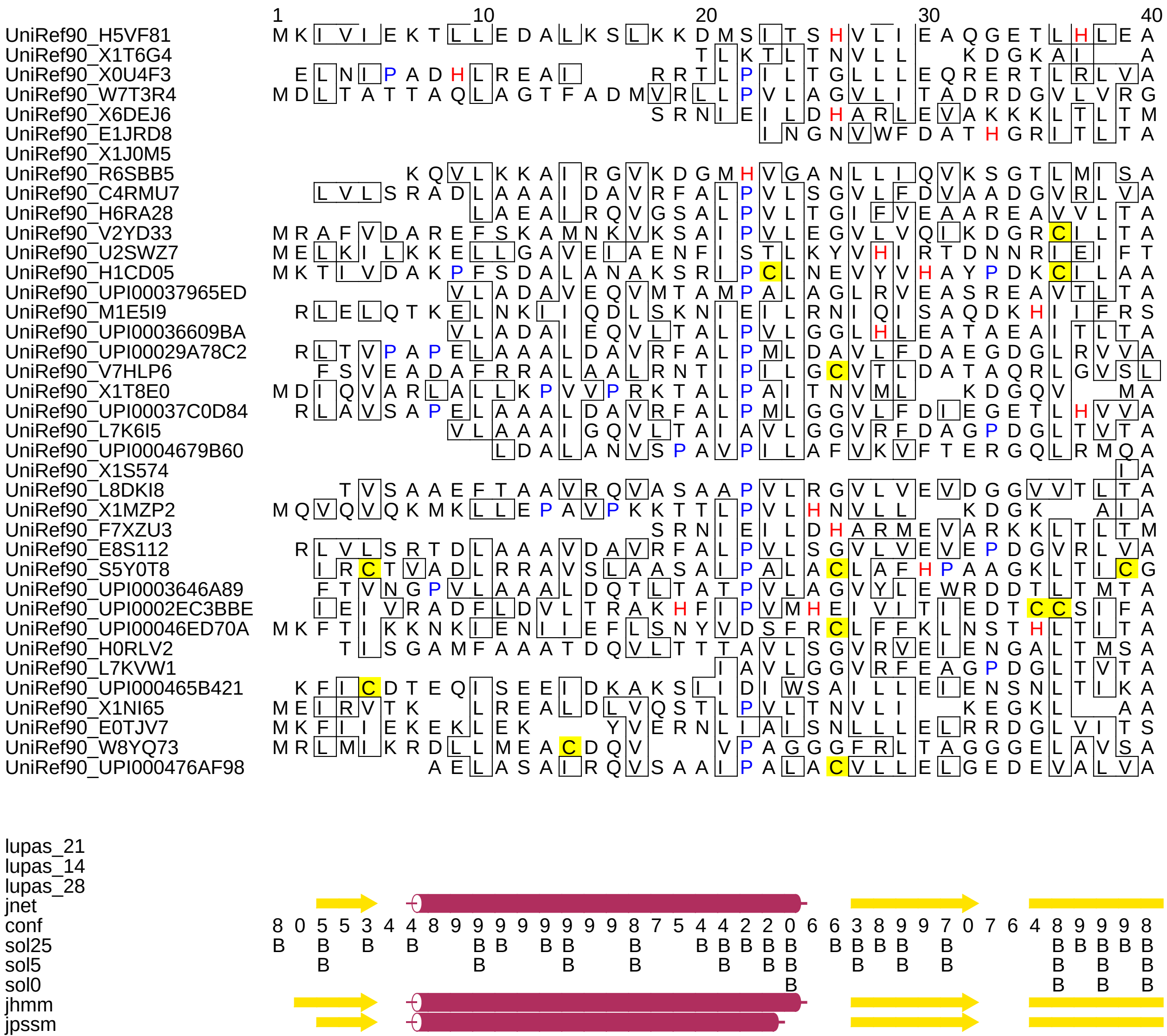

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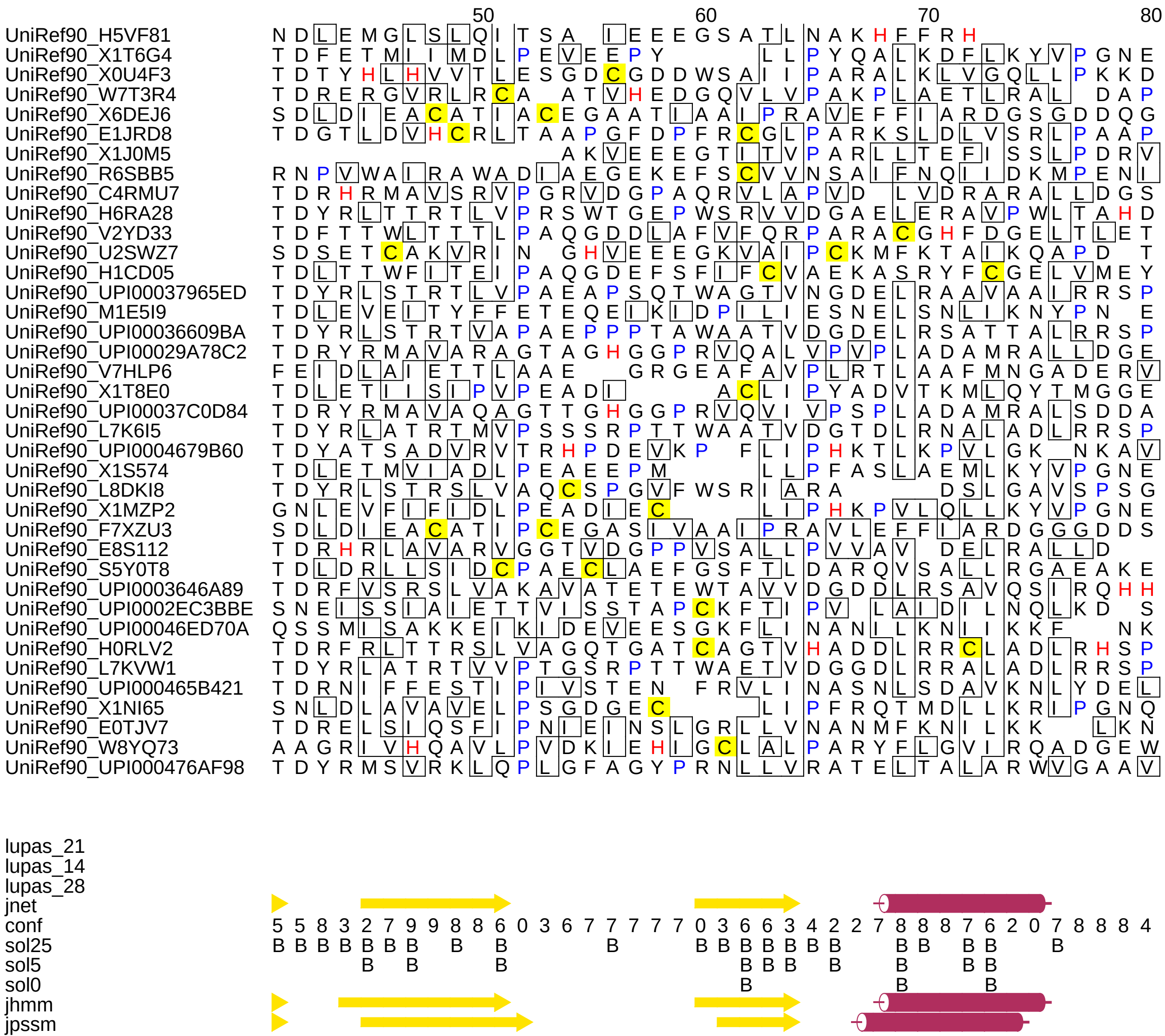

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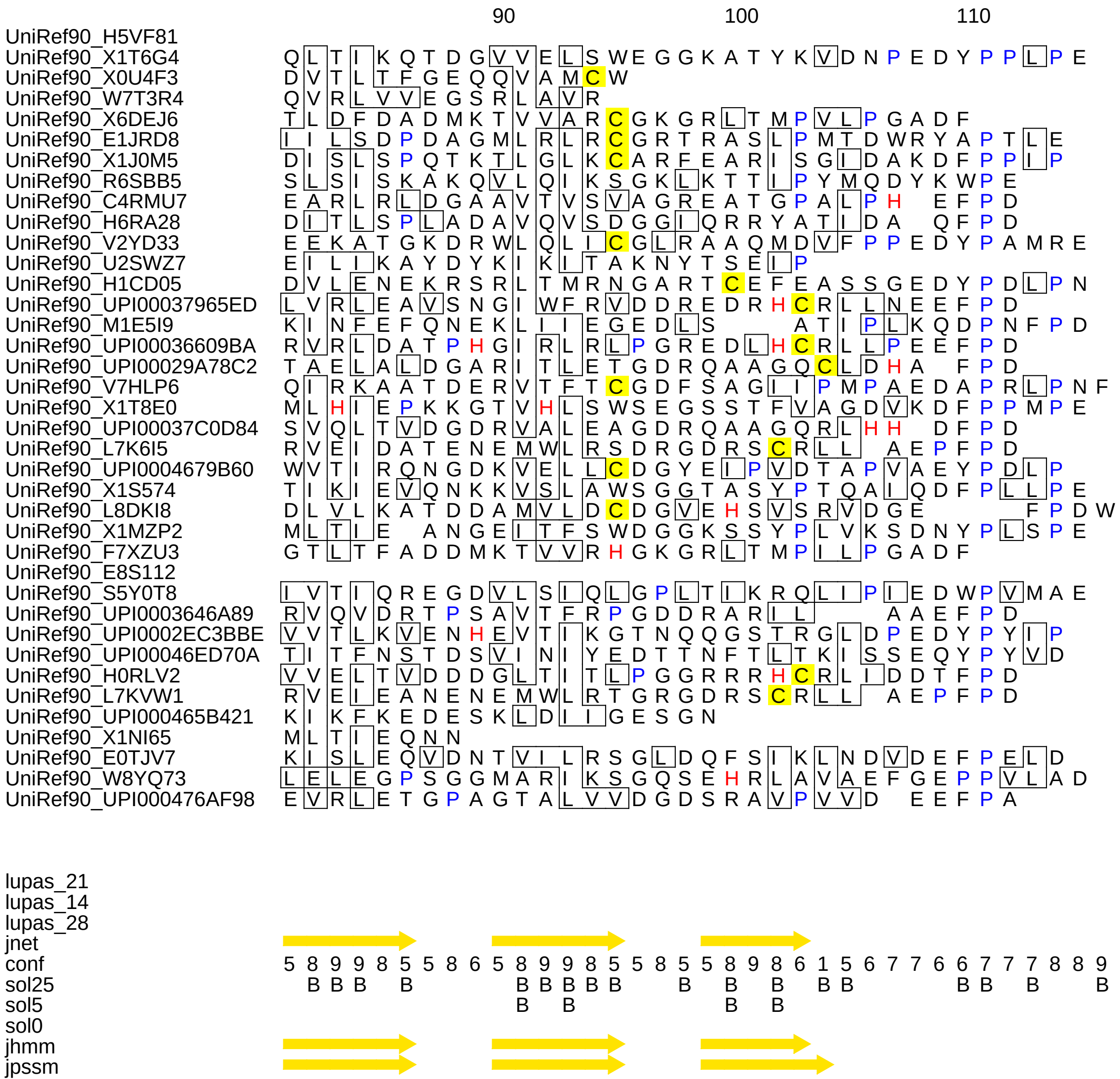

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