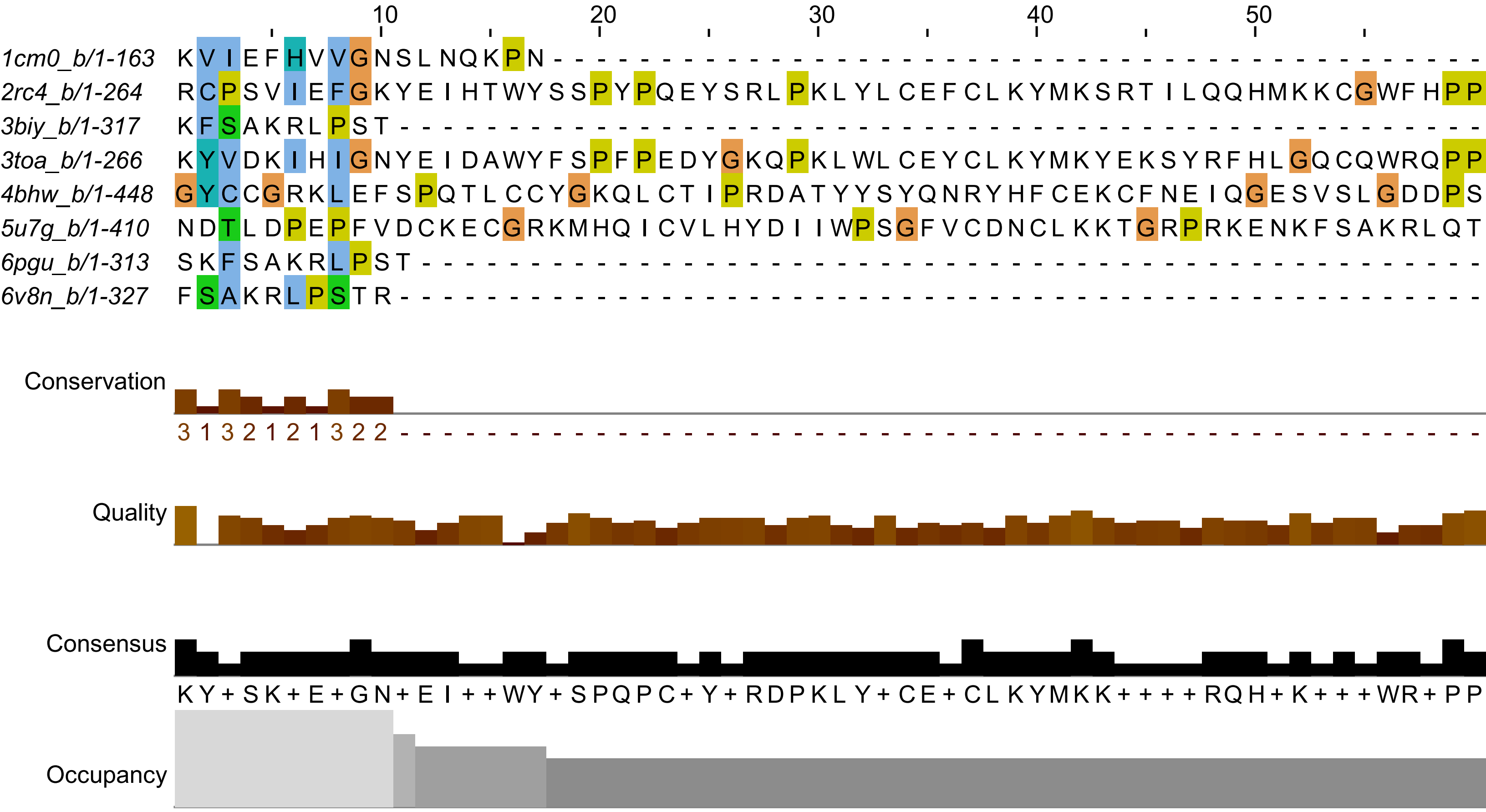
Supplementary Data

The Biological Significance of Targeting Acetylation-mediated Gene Regulation for Designing New Mechanistic Tools and Potential Therapeutics

Chenise O'Garro[1#], Loveth Igbineweka[1#], Zonaira Ali[1], Mihaly Mezei[2], and Shiraz Mujtaba[1*]

The EMBL sequence analysis was then used to perform multiple sequence alignment using the Clustal Omega program tool' is missing the word tool after sequence analysis.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3biy_b/1-317 KFSAKRLPST
3toa_b/1-266 KYVDKIHIGNYEIDAWYFSPFPEDYGKQPKLWLCEYCLKYMKYEKSYRFHLGQCQWRQPP
4bhw_b/1-448 GYCCGRKLEFSPQTLCCYGKQLCTIPRDATYYSYQNRYHFCEKCFNEIQGESVSLGDDPS
5u7g_b/1-410 NDTLDPEPFVDCKECGRKMHQICVLHYDIIWPSGFVCDNCLKKTGRPRKENKFSAKRLQT
6pgu_b/1-313 SKFSAKRLPST
6v8n_b/1-327 FSAKRLPSTR
Conservation
3 1 3 2 1 2 1 3 2 2
Quality
Consensus
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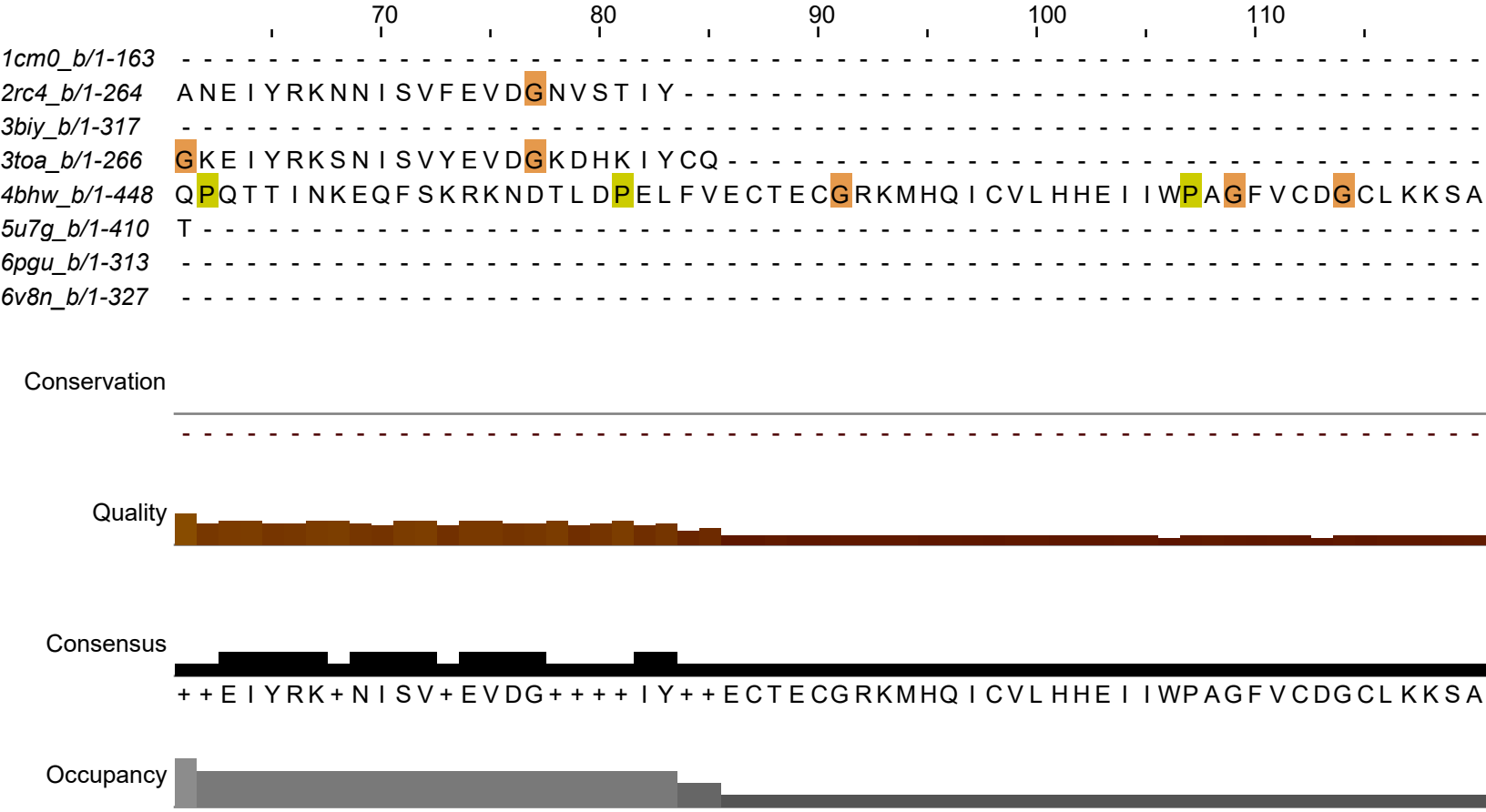
Occupancy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80
90
100
110
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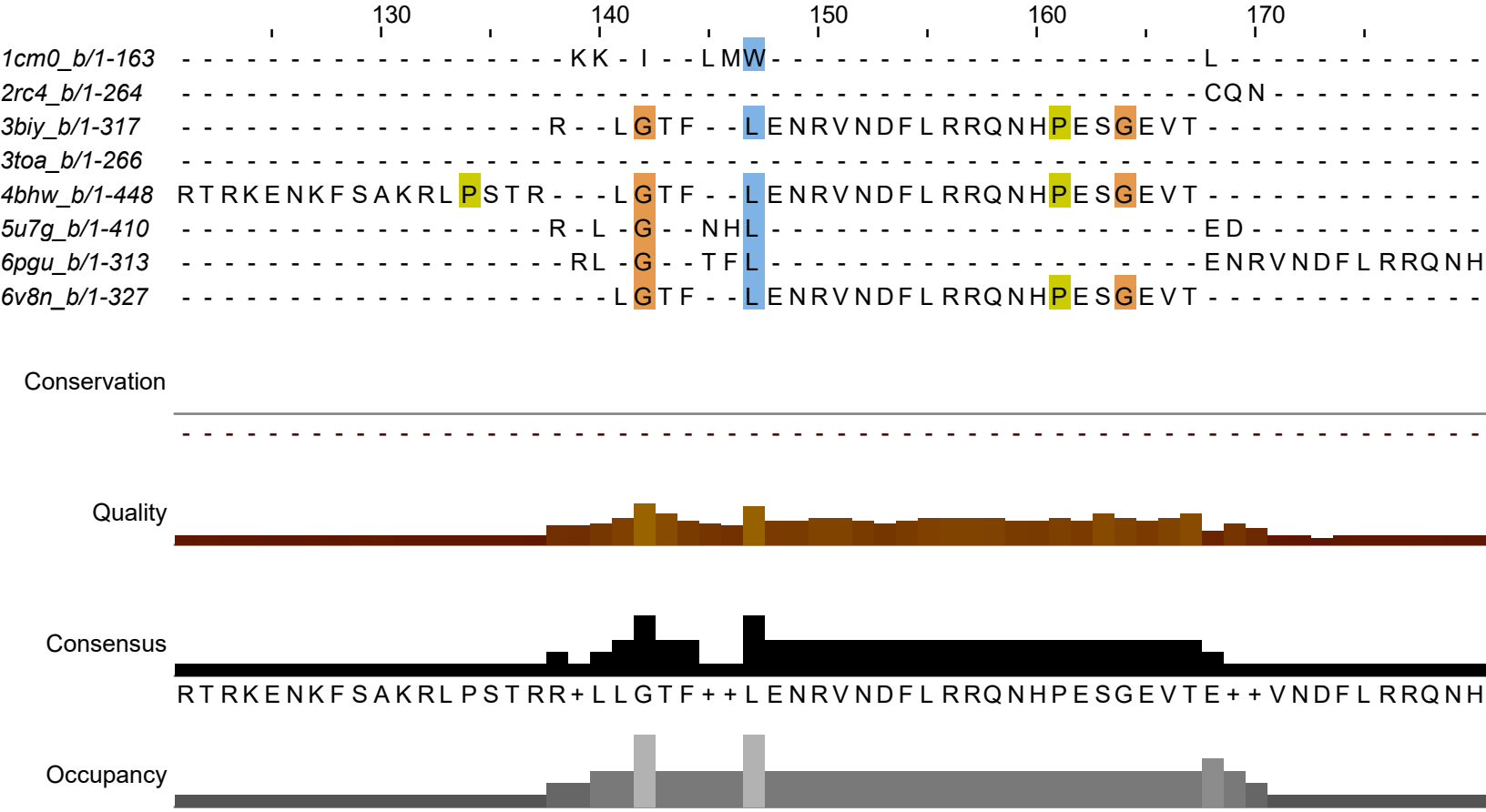
3biy_b/1-317
3toa_b/1-266 G K E I Y R K S N I S V Y E V D G K D H K I Y C Q
4bhw_b/1-448 Q P Q T T I N K E Q F S K R K N D T L D P E L F V E C T E C G R K M H Q I C V L H H E I I W P A G F V C D G C L K K S A
5u7g_b/1-410 T
6pgu_b/1-313
6v8n_b/1-327
Conservation
Quality
Consensus
+ + E I Y R K + N I S V + E V D G + + + + I Y + + E C T E C G R K M H Q I C V L H H E I I W P A G F V C D G C L K K S A
Occupancy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2rc4_b/1-264 - C Q N - - - - - - - - - -
3biy_b/1-317 - - - - - - - - - - - - - - - - - - R - - L G T F - - L E N R V N D F L R R Q N H P E S G E V T - - - - - - - - - - - - -
3toa_b/1-266 -
4bhw_b/1-448 R T R K E N K F S A K R L P S T R - - - L G T F - - L E N R V N D F L R R Q N H P E S G E V T - - - - - - - - - - - - -
5u7g_b/1-410 - - - - - - - - - - - - - - - - - - R - L - G - - N H L - E D - - - - - - - - - - - -
6pgu_b/1-313 - - - - - - - - - - - - - - - - - - - R L - G - - T F L - E N R V N D F L R R Q N H
6v8n_b/1-327 - L G T F - - L E N R V N D F L R R Q N H P E S G E V T - - - - - - - - - - - - -
Conservation
Quality
Consensus
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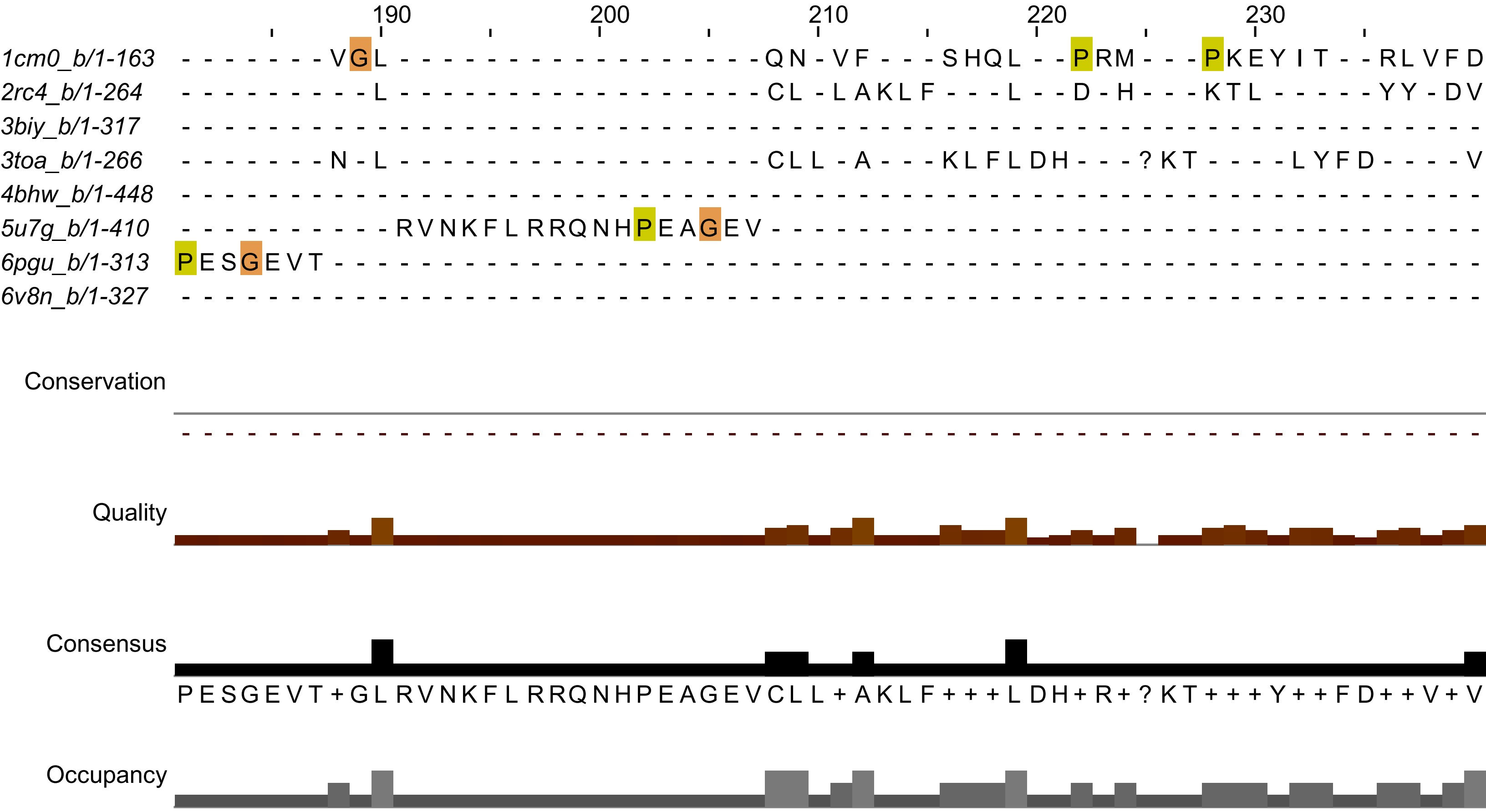
Occupancy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230
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2rc4_b/1-264
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3toa_b/1-266
4bhw_b/1-448
5u7g_b/1-410
6pgu_b/1-313
6v8n_b/1-327
Conservation
Quality
Consensus
Occupancy
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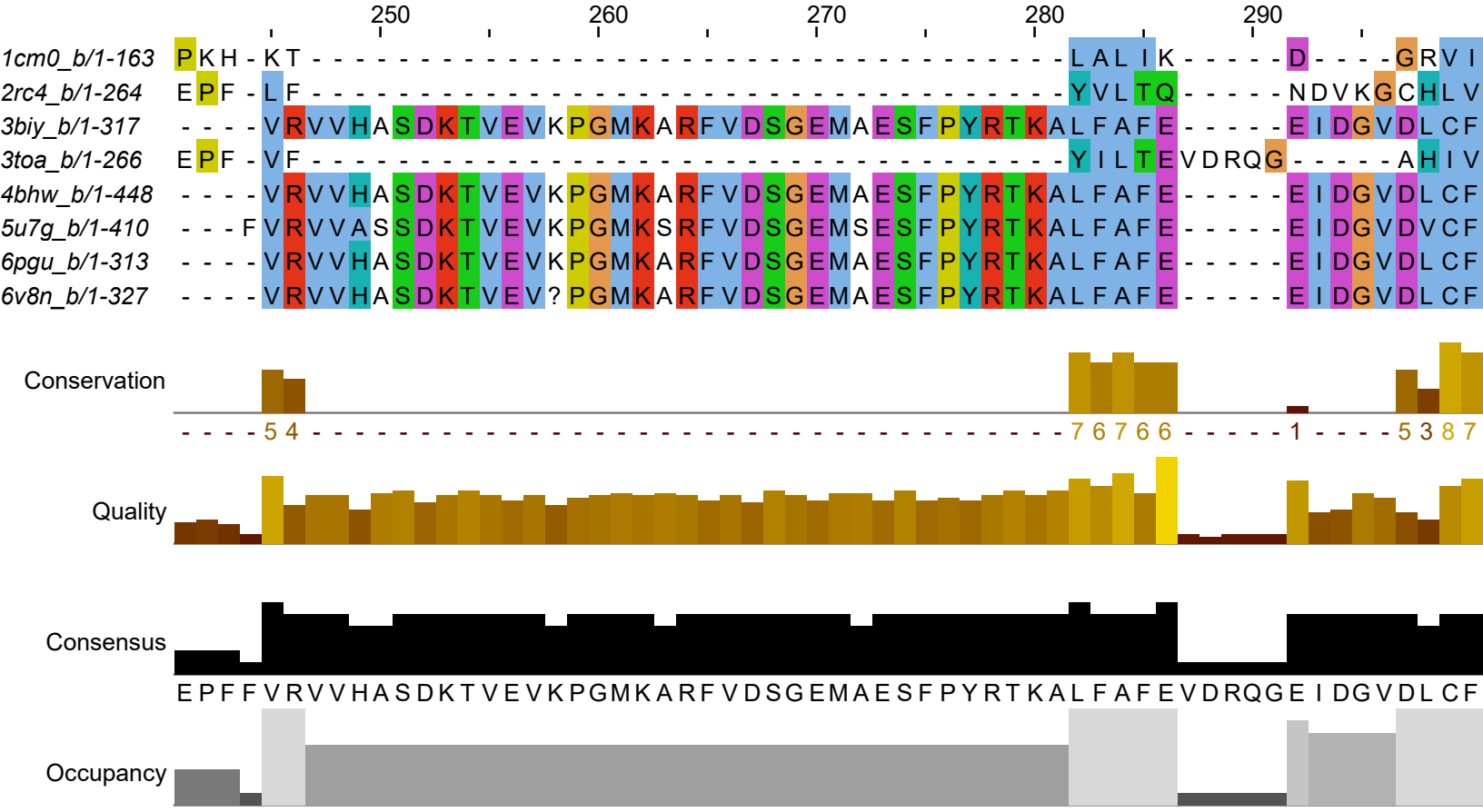
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3biy_b/1-317 ----VRVVHASDKTVEVKPGMKARFVDSGEMAESFPYRTKALFAFE-----EIDGVDLCF
3toa_b/1-266 EPF-VF----------YILTEVDRQG-----AHIV
4bhw_b/1-448 ----VRVVHASDKTVEVKPGMKARFVDSGEMAESFPYRTKALFAFE-----EIDGVDLCF
5u7g_b/1-410 ---FVRVVASSDKTVEVKPGMKSRFVDSGEMSESFPYRTKALFAFE-----EIDGVDVCF
6pgu_b/1-313 ----VRVVHASDKTVEVKPGMKARFVDSGEMAESFPYRTKALFAFE-----EIDGVDLCF
6v8n_b/1-327 ----VRVVHASDKTVEV?PGMKARFVDSGEMAESFPYRTKALFAFE-----EIDGVDLCF
Conservation
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Quality
Consensus
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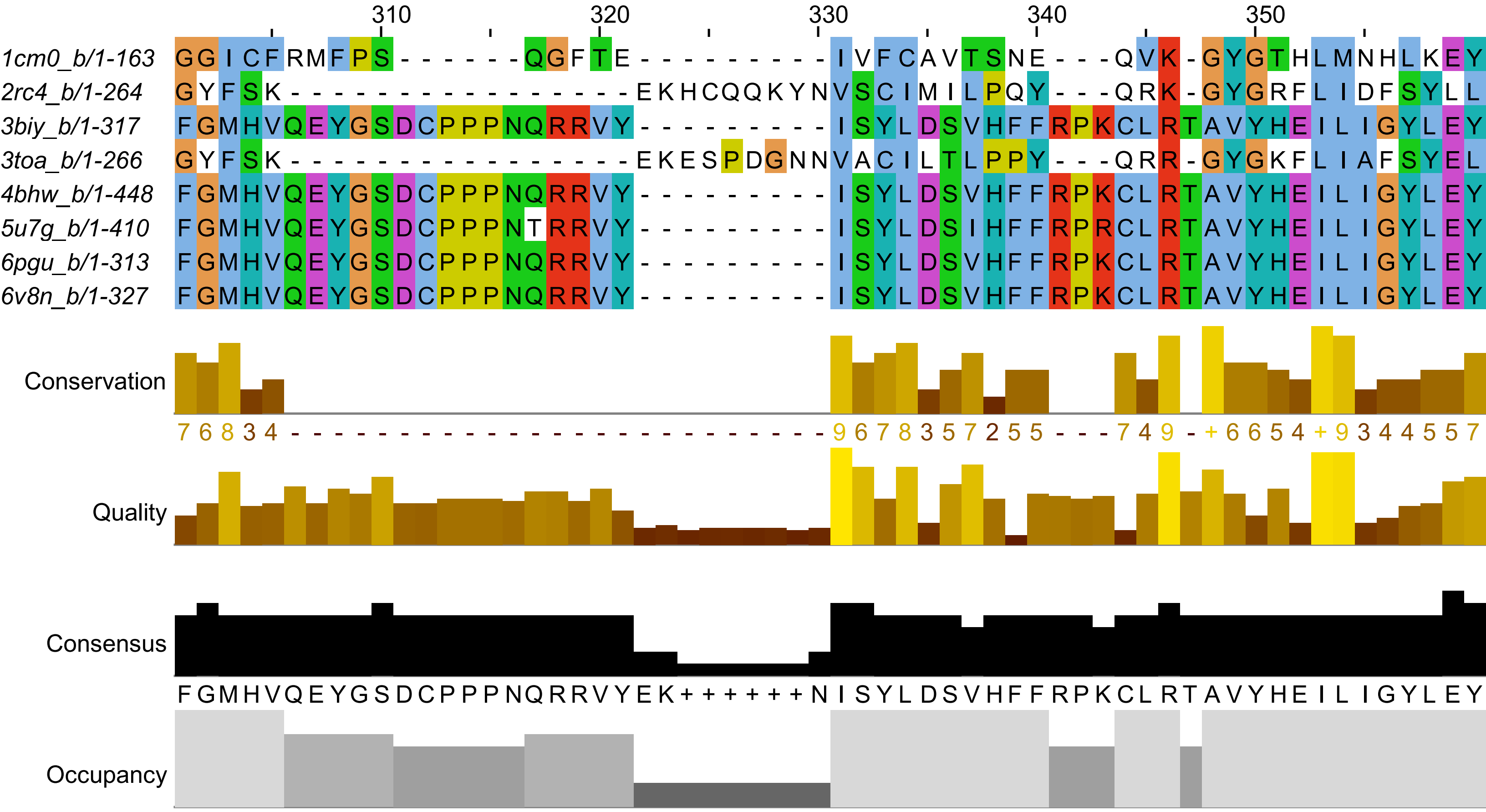
Occupancy



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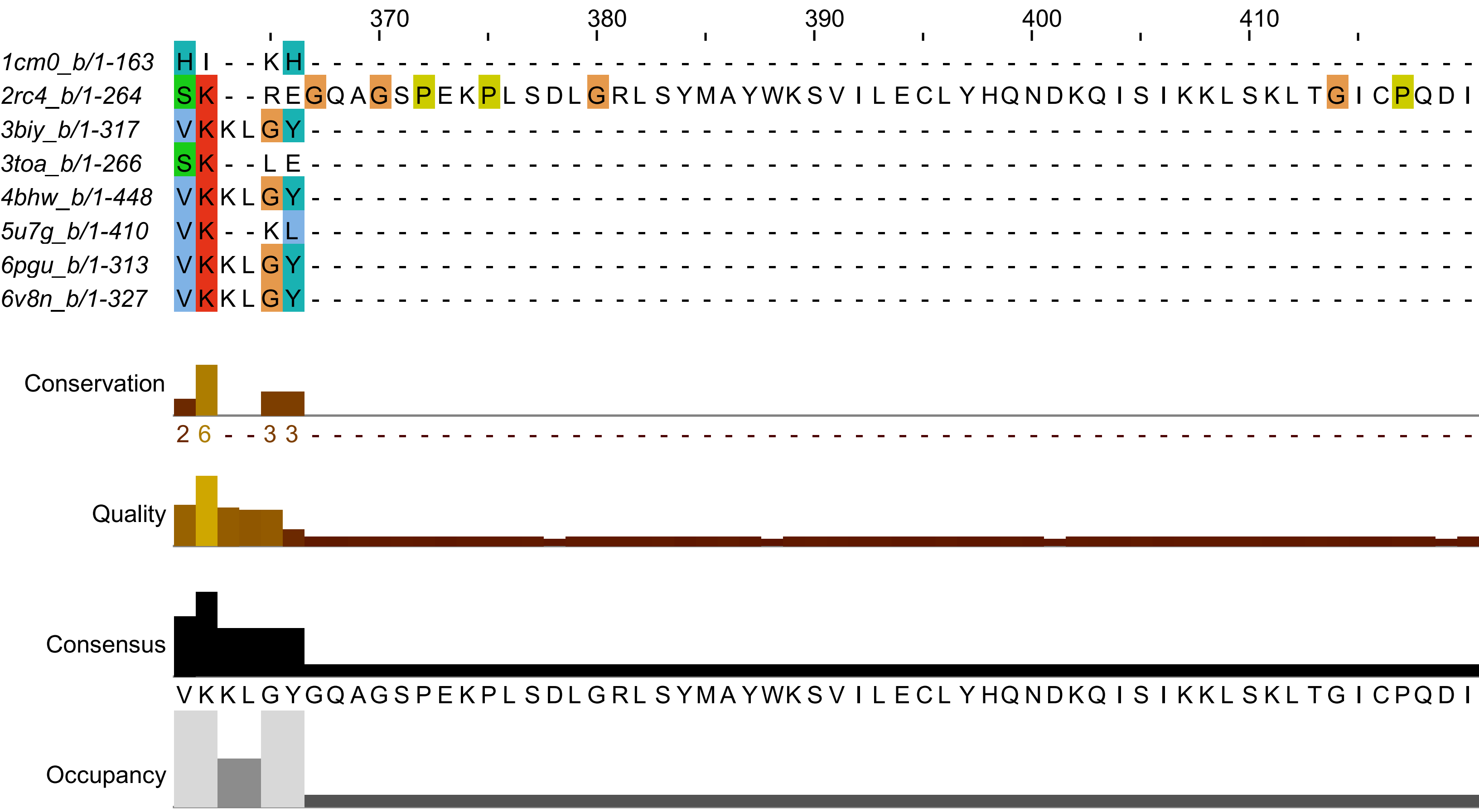
6v8n_b/1-327
Conservation
Quality
Consensus
Occupancy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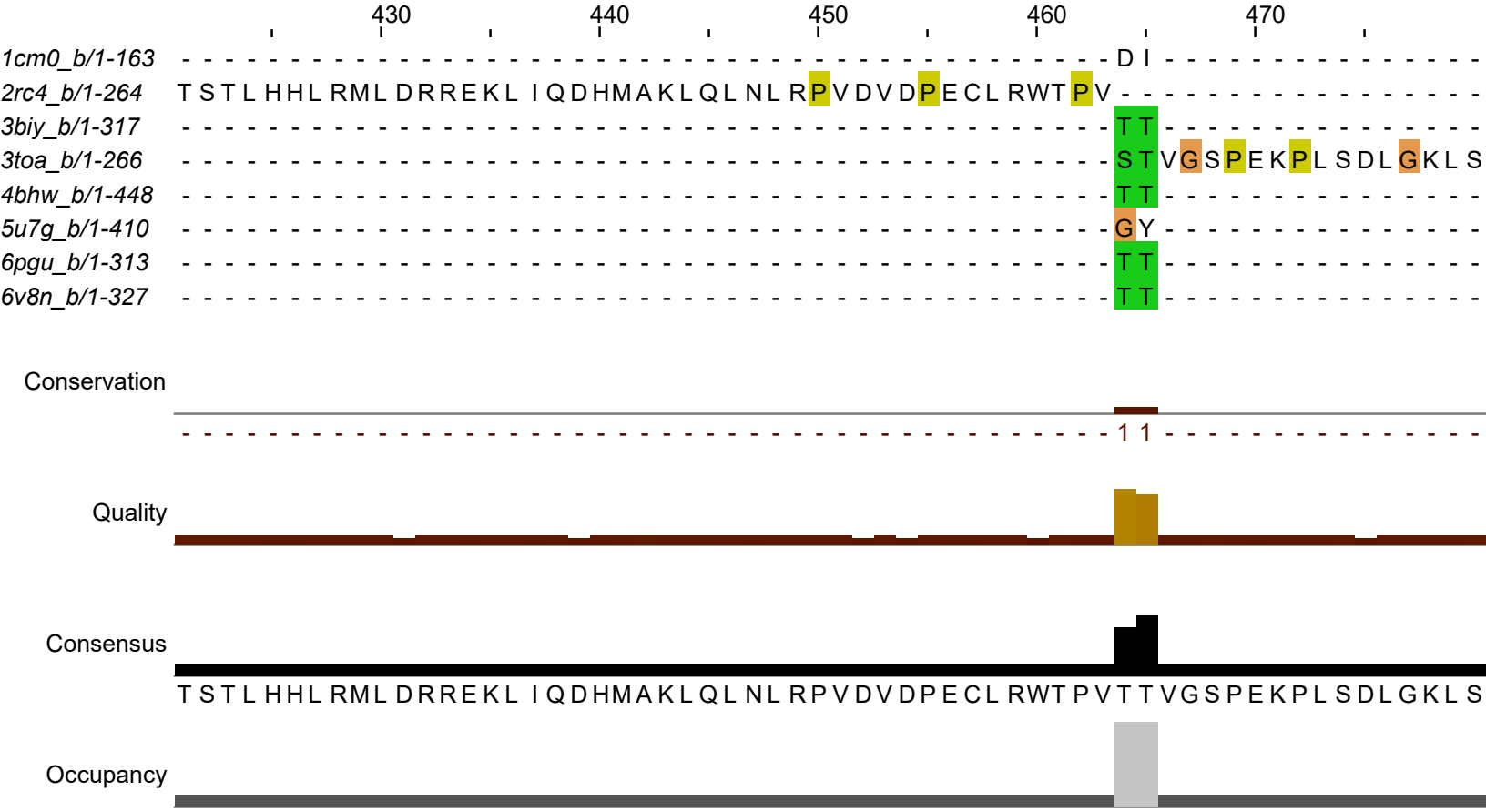
Conservation
Quality
Consensus
Occupancy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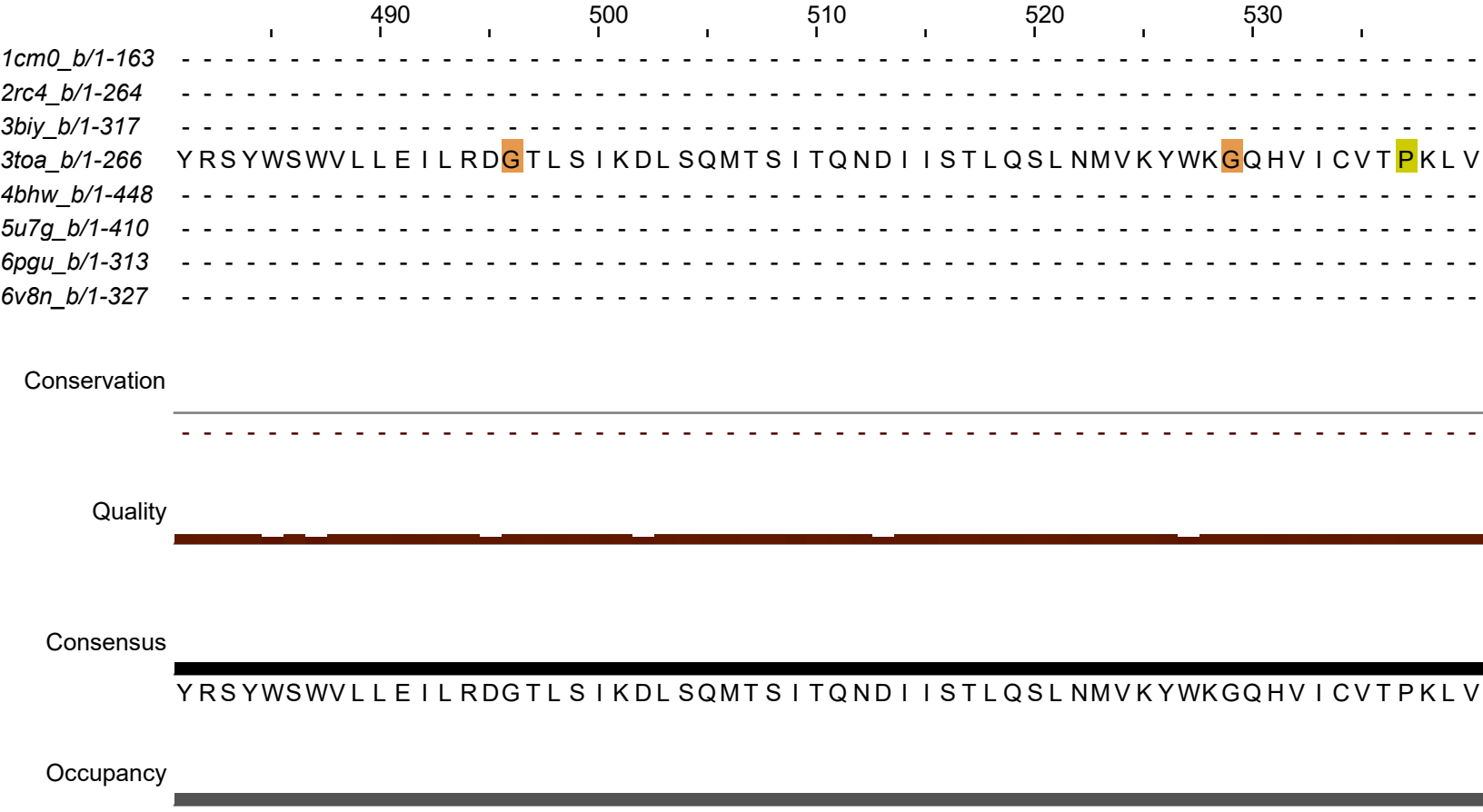
5u7g_b/1-410
6pgu_b/1-313
6v8n_b/1-327
Conservation
Quality
Consensus
Occupancy
T S T L H H L R M L D R R E K L I Q D H M A K L Q L N L R P V D V D P E C L R W T P V T T V G S P E K P L S D L G K L S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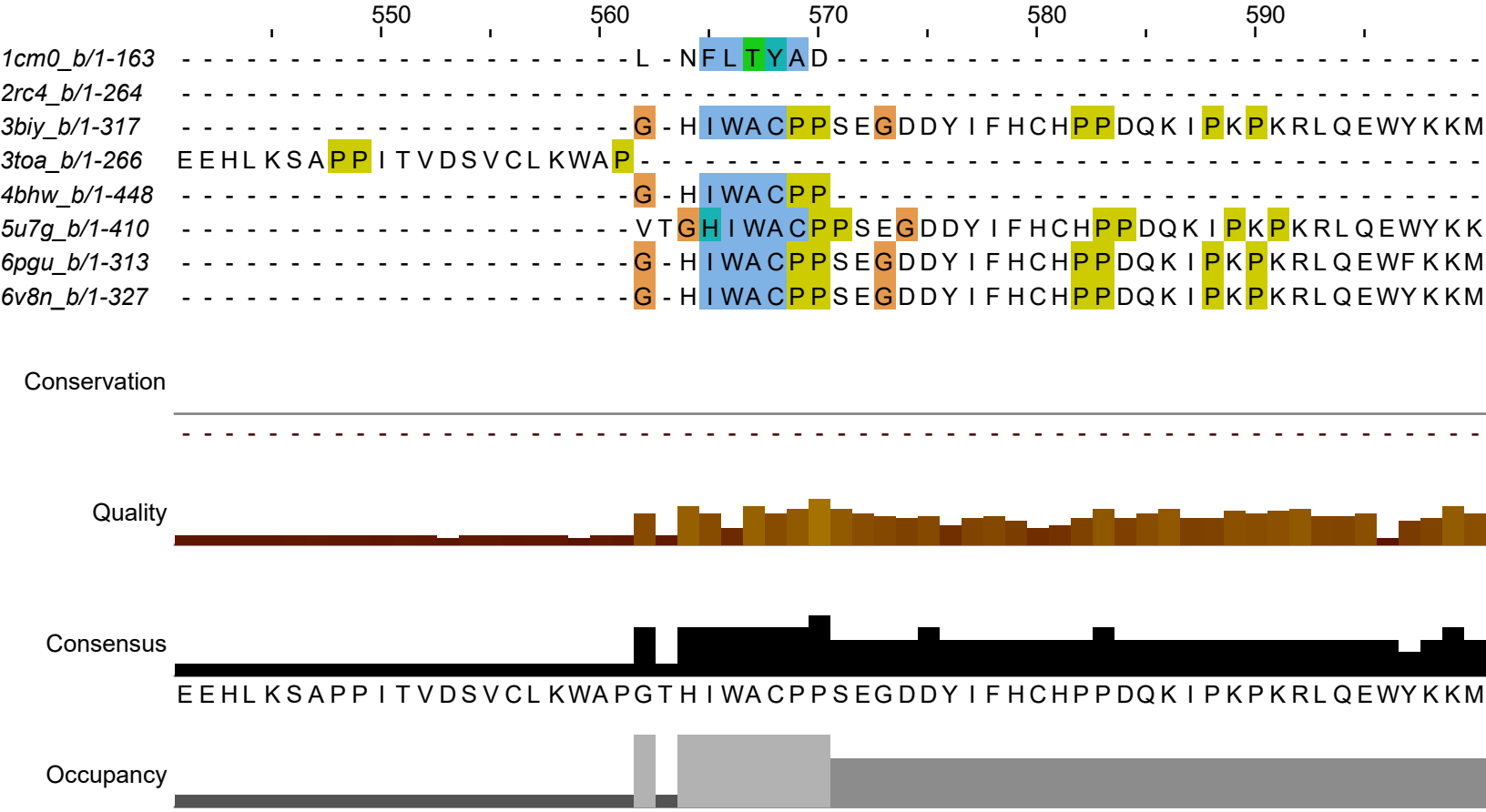
2rc4_b/1-264
3biy_b/1-317
3toa_b/1-266 Y R S Y W S W V L L E I L R D G T L S I K D L S Q M T S I T Q N D I I S T L Q S L N M V K Y W K G Q H V I C V T P K L V
4bhw_b/1-448
5u7g_b/1-410
6pgu_b/1-313
6v8n_b/1-327
Conservation
Quality
Consensus
Y R S Y W S W V L L E I L R D G T L S I K D L S Q M T S I T Q N D I I S T L Q S L N M V K Y W K G Q H V I C V T P K L V
Occupancy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5u7g_b/1-410
6pgu_b/1-313
6v8n_b/1-327
Conservation
Quality
Consensus
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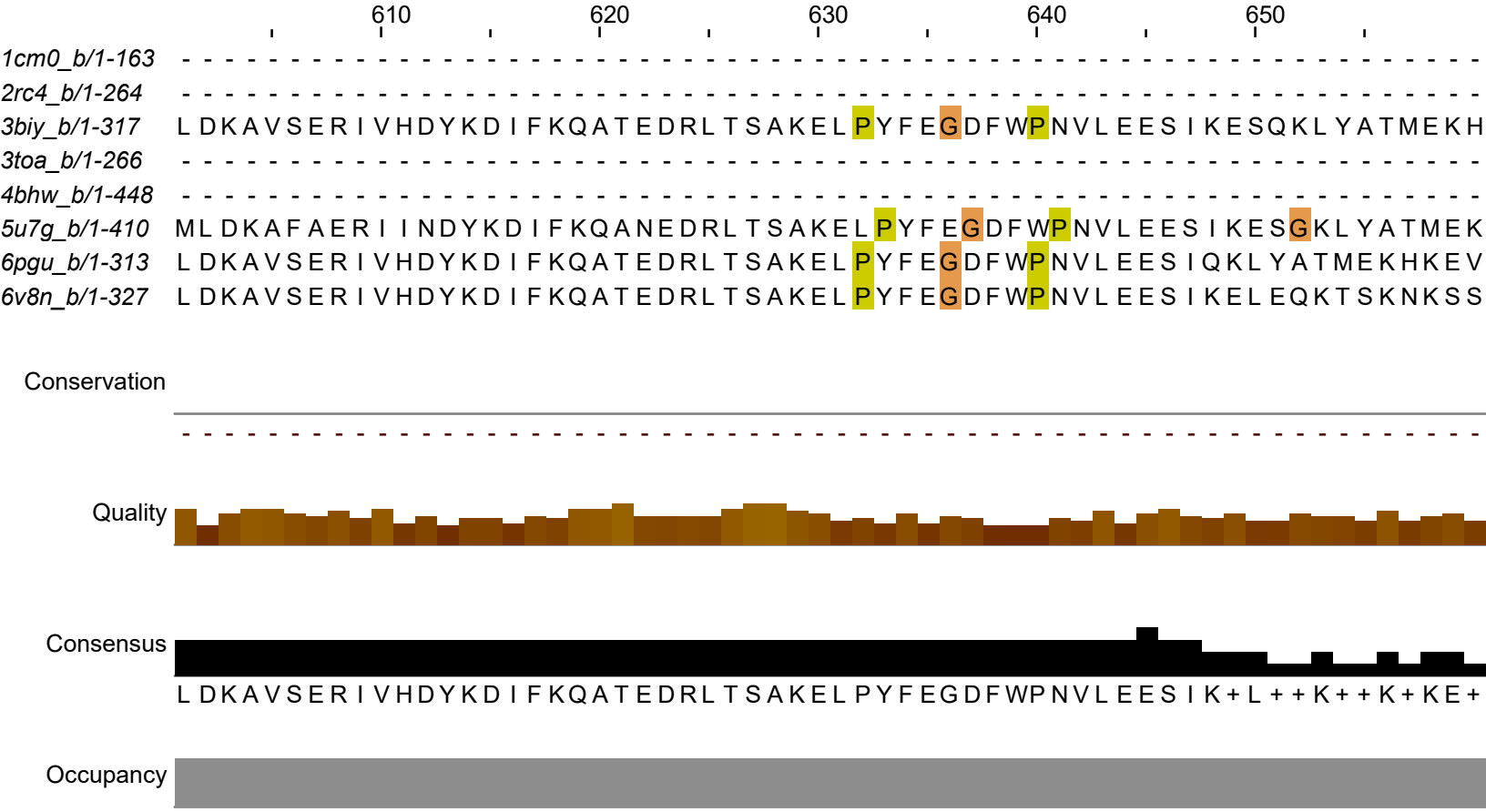
Occupancy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3toa_b/1-266
4bhw_b/1-448
5u7g_b/1-410 M L D K A F A E R I I N D Y K D I F K Q A N E D R L T S A K E L P Y F E G D F W P N V L E E S I K E S G K L Y A T M E K
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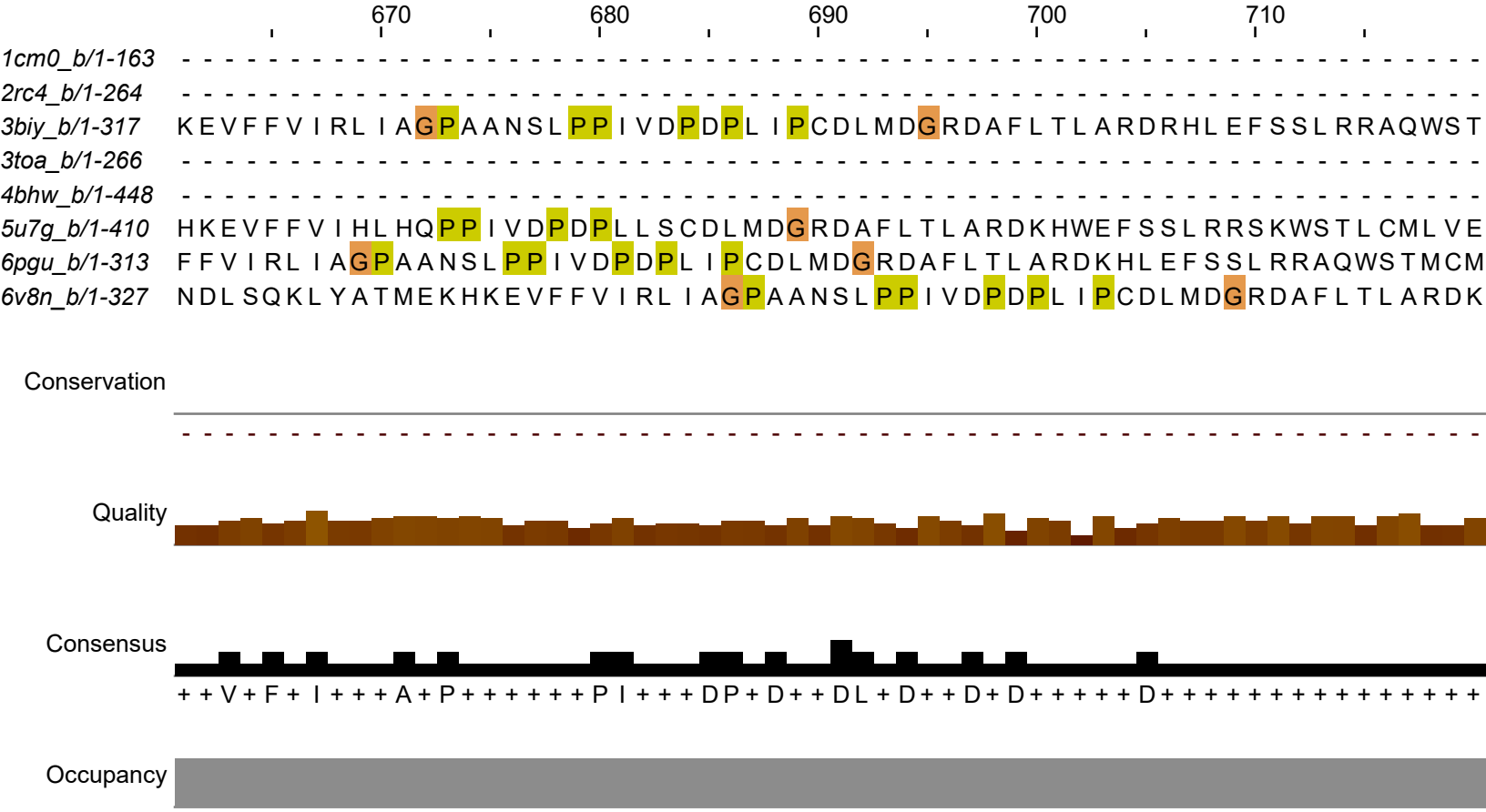
6v8n_b/1-327 L D K A V S E R I V H D Y K D I F K Q A T E D R L T S A K E L P Y F E G D F W P N V L E E S I K E L E Q K T S K N K S S
Conservation
Quality
Consensus
L D K A V S E R I V H D Y K D I F K Q A T E D R L T S A K E L P Y F E G D F W P N V L E E S I K + L + + K + + K + K E +
Occupancy


670
680
690
700
710
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2rc4_b/1-264
3biy_b/1-317 K E V F F V I R L I A G P A A N S L P P I V D P D P L I P C D L M D G R D A F L T L A R D R H L E F S S L R R A Q W S T
3toa_b/1-266
4bhw_b/1-448
5u7g_b/1-410 H K E V F F V I H L H Q P P I V D P D P L L S C D L M D G R D A F L T L A R D K H W E F S S L R R S K W S T L C M L V E
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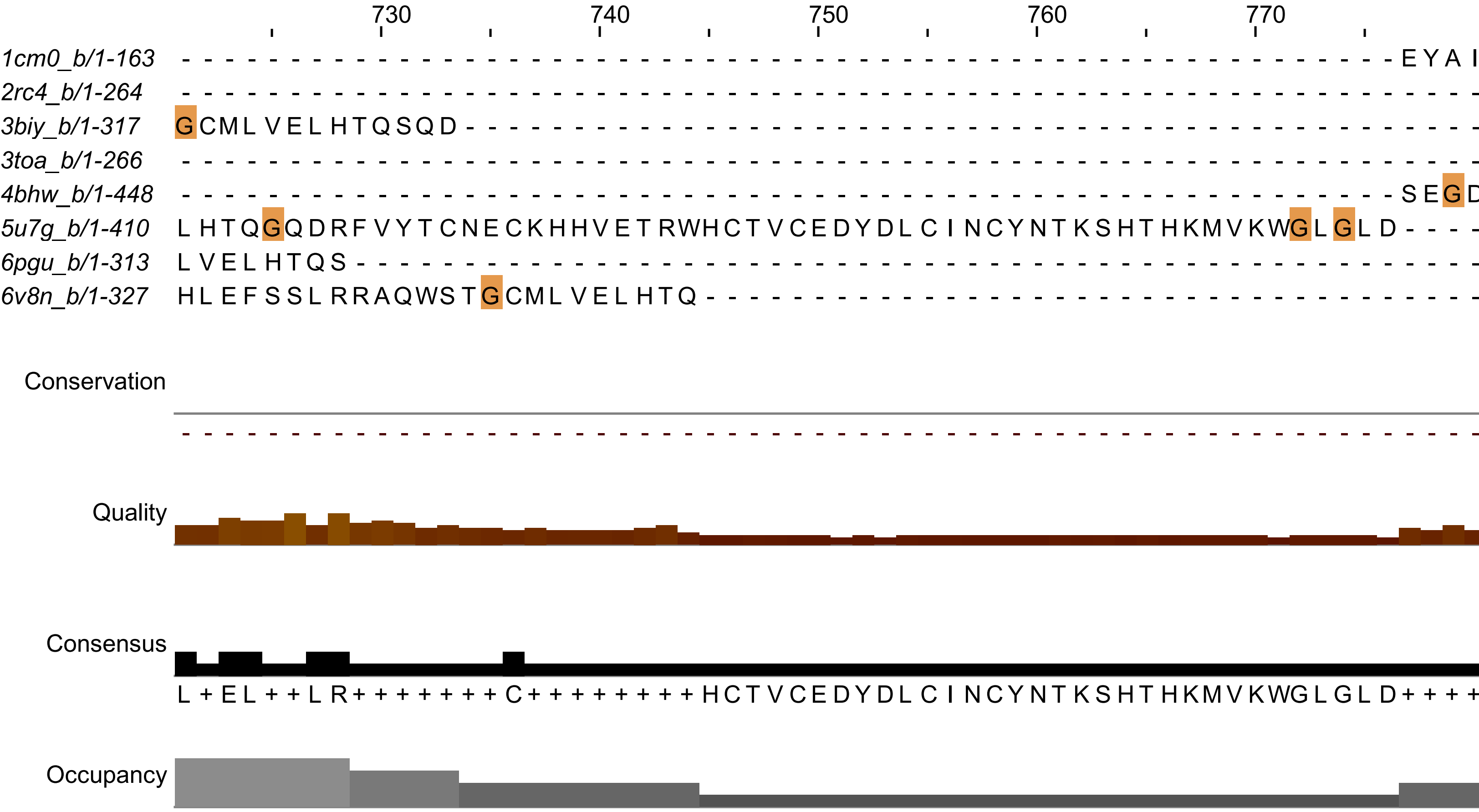
6v8n_b/1-327 N D L S Q K L Y A T M E K H K E V F F V I R L I A G P A A N S L P P I V D P D P L I P C D L M D G R D A F L T L A R D K
Conservation
Quality
Consensus
+ + V + F + I + + + A + P + + + + + + P I + + + D P + D + + D L + D + + D + D + + + + + D + + + + + + + + + + + + + + +
Occupancy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4bhw_b/1-448 SEGD
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6pgu_b/1-313 LVELHTQS
6v8n_b/1-327 HLEFSSLRRAQWSTGCMLVELHTQ
Conservation
Quality
Consensus
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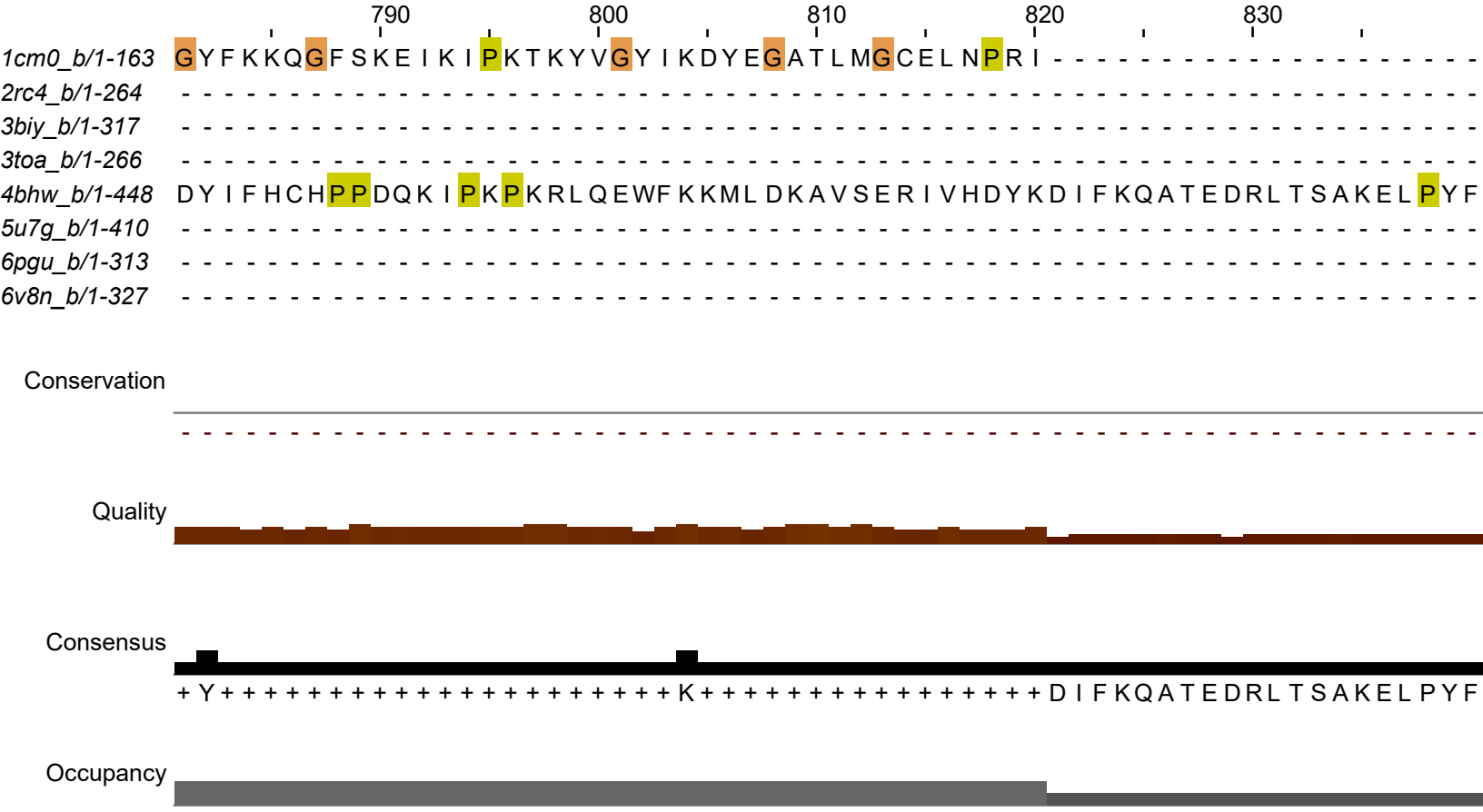
Occupancy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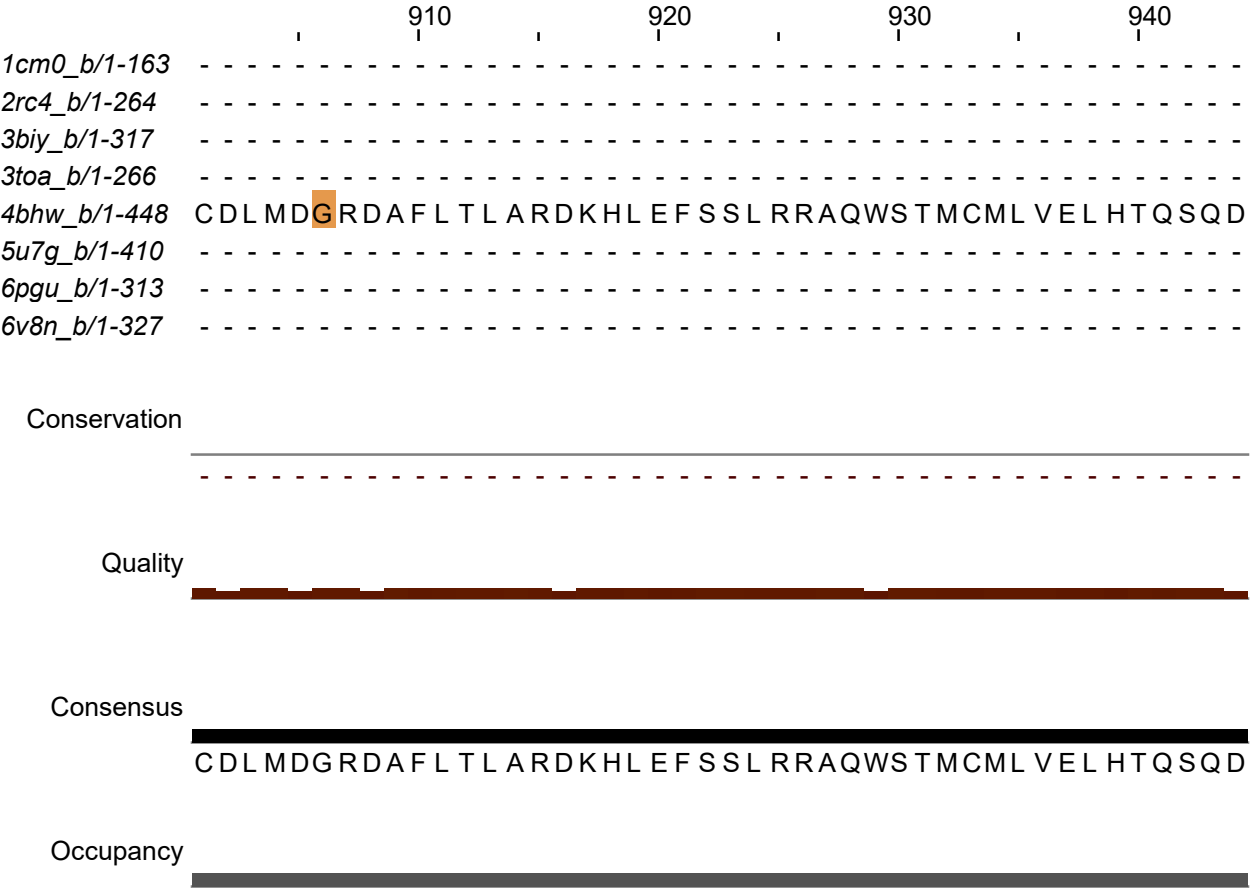
2rc4_b/1-264
3biy_b/1-317
3toa_b/1-266
4bhw_b/1-448 D Y I F H C H P P D Q K I P K P K R L Q E W F K K M L D K A V S E R I V H D Y K D I F K Q A T E D R L T S A K E L P Y F
5u7g_b/1-410
6pgu_b/1-313
6v8n_b/1-327
Conservation
Quality
Consensus
+ Y + K + + + + + + + + + + + + + + + + + D I F K Q A T E D R L T S A K E L P Y F
Occupancy

850
860
870
880
890
1cm0_b/1-163
2rc4_b/1-264
3biy_b/1-317
3toa_b/1-266
4bhw_b/1-448 E G D F W P N V L E E S I K E S G G S G S Q K L Y A T M E K H K E V F F V I R L I A G P A A N S L P P I V D P D P L I P
5u7g_b/1-410
6pgu_b/1-313
6v8n_b/1-327
Conservation
Quality
Consensus
E G D F W P N V L E E S I K E S G G S G S Q K L Y A T M E K H K E V F F V I R L I A G P A A N S L P P I V D P D P L I P
Occupancy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4bhw_b/1-448 C D L M D G R D A F L T L A R D K H L E F S S L R R A Q W S T M C M L V E L H T Q S Q D
5u7g_b/1-410
6pgu_b/1-313
6v8n_b/1-327
Conservation
Quality
Consensus
C D L M D G R D A F L T L A R D K H L E F S S L R R A Q W S T M C M L V E L H T Q S Q D
Occupancy