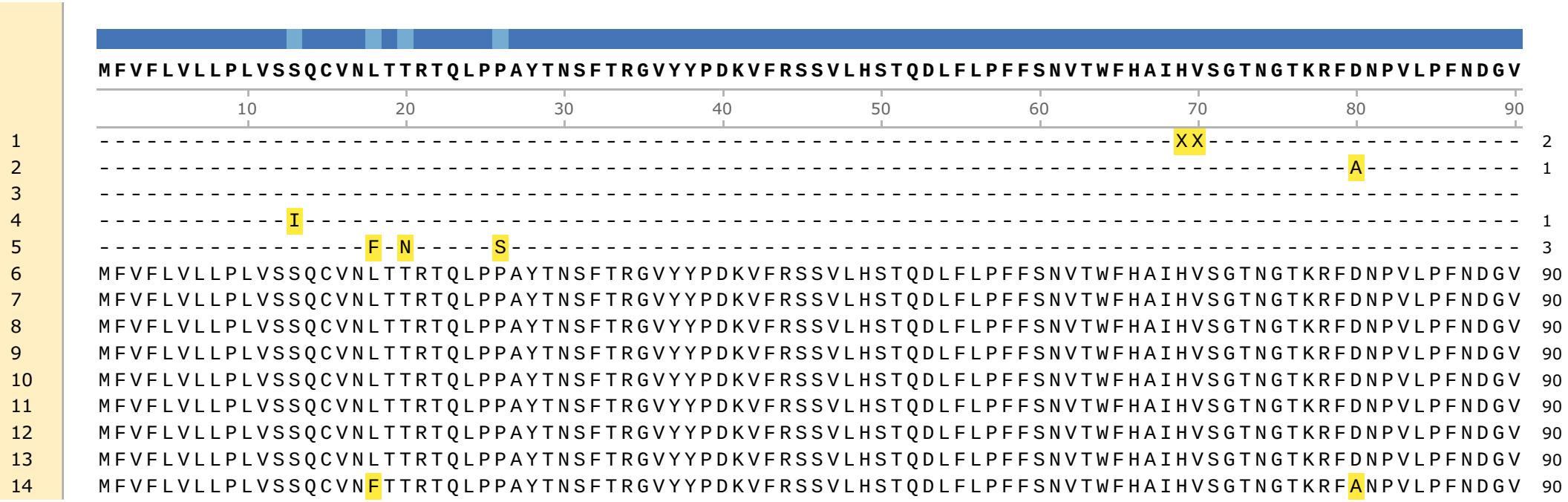
# Aligned using an external algorithm

**Consensus**

**1.** B.1.1.7
**2.** B.1.351
**3.** B.1.427
**4.** B.1.429
**5.** P.1
**6.** Ref YP_009724390.1 surface glycoprotein [Severe acute respiratory syndrome coronavirus 2]
**7.** Ref QHD43416.1 surface glycoprotein [Severe acute respiratory syndrome coronavirus 2]
**8.** mRNA-1273_vaccine_translated
**9.** BNT-162b2_vaccine_translated
**0.** Ad26.COV2-S_vaccine_translated
**1.** NVX-CoV2373_vaccine_translated
**2.** Sputnik V alleged unmodified YP_009724390.1
**3.** AZD1222 alleged unmodified YP_009724390.1
**4.** AZD2816 modified YP_009724390.1 variants from B.1.351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90
1 - - -

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2 1
3
4 C 2
5 Y 4
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2 G XXX 5
3
4 2
5 S 5
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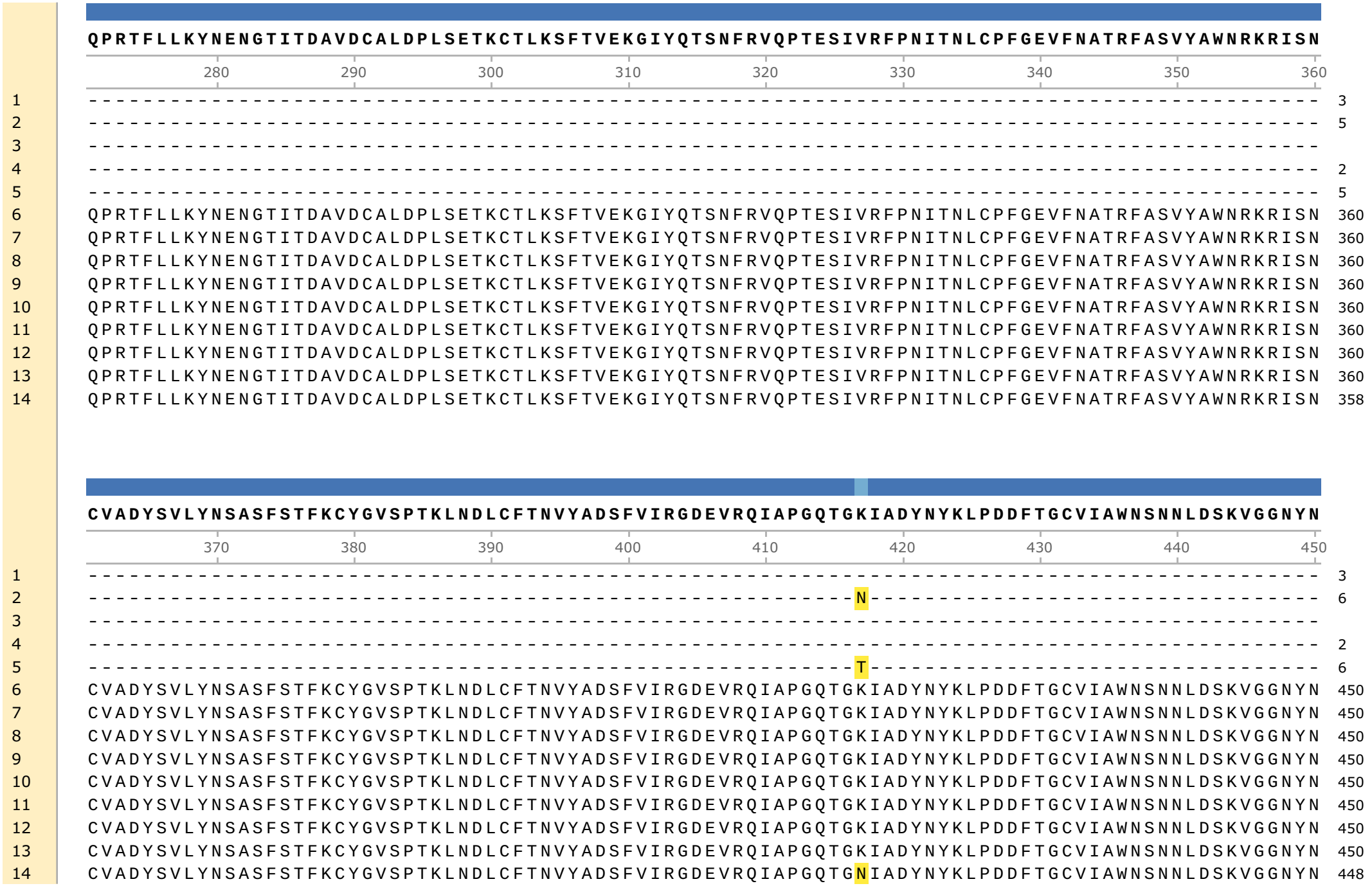
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3 ----------
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5 ---------- 5
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370 380 390 400 410 420 430 440 450
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2 ----------N---------- 6
3 ----------
4 ---------- 2
5 ----------T---------- 6
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7 CVADYSVLYNSASFSTFKCYGVSPTKLNDLCFTNVYADSFVIRGDEVRQIAPGQTGKIADYNYKLPDDFTGCVIAWNSNNLDSKVGGNYN 450
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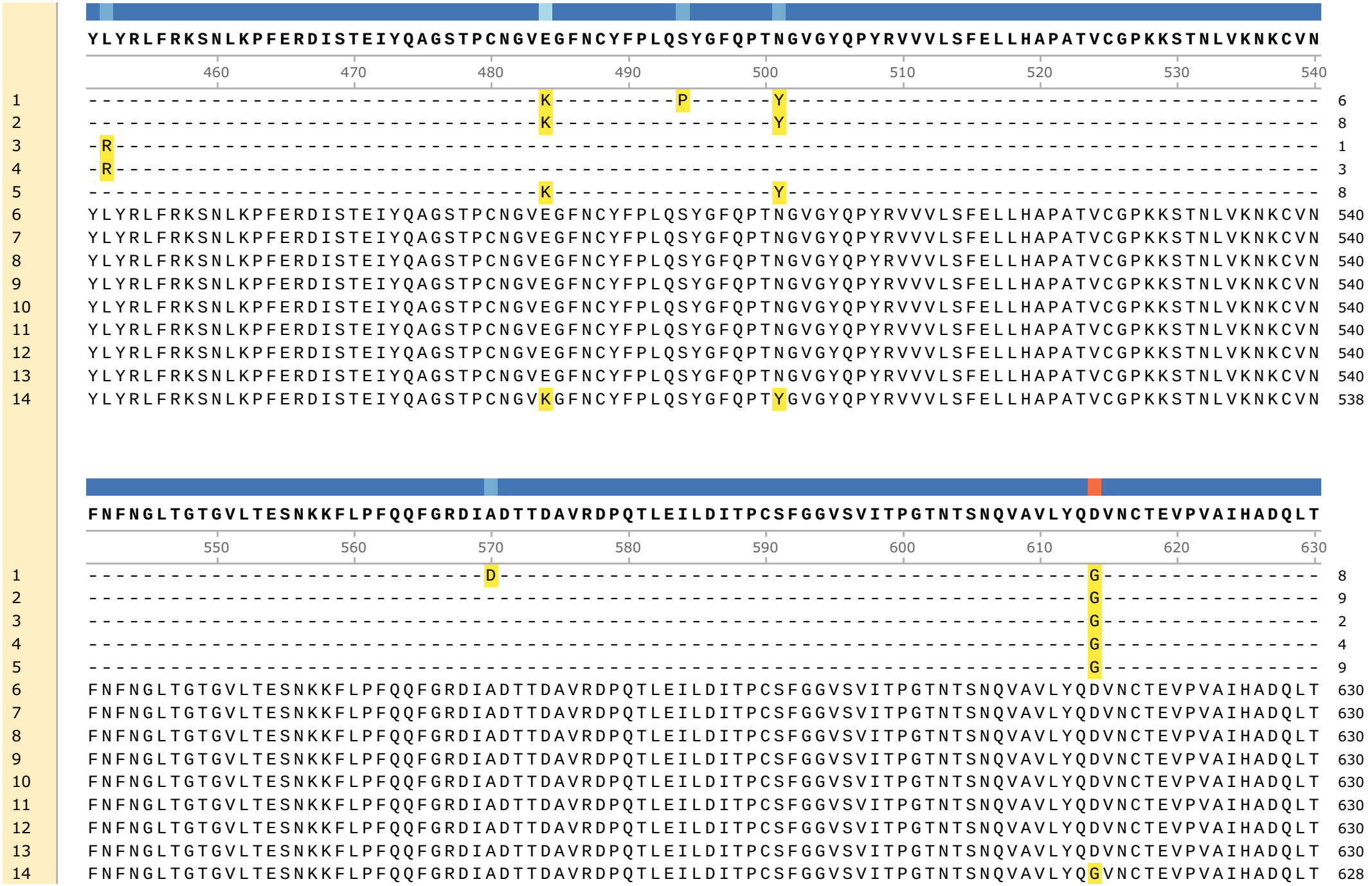
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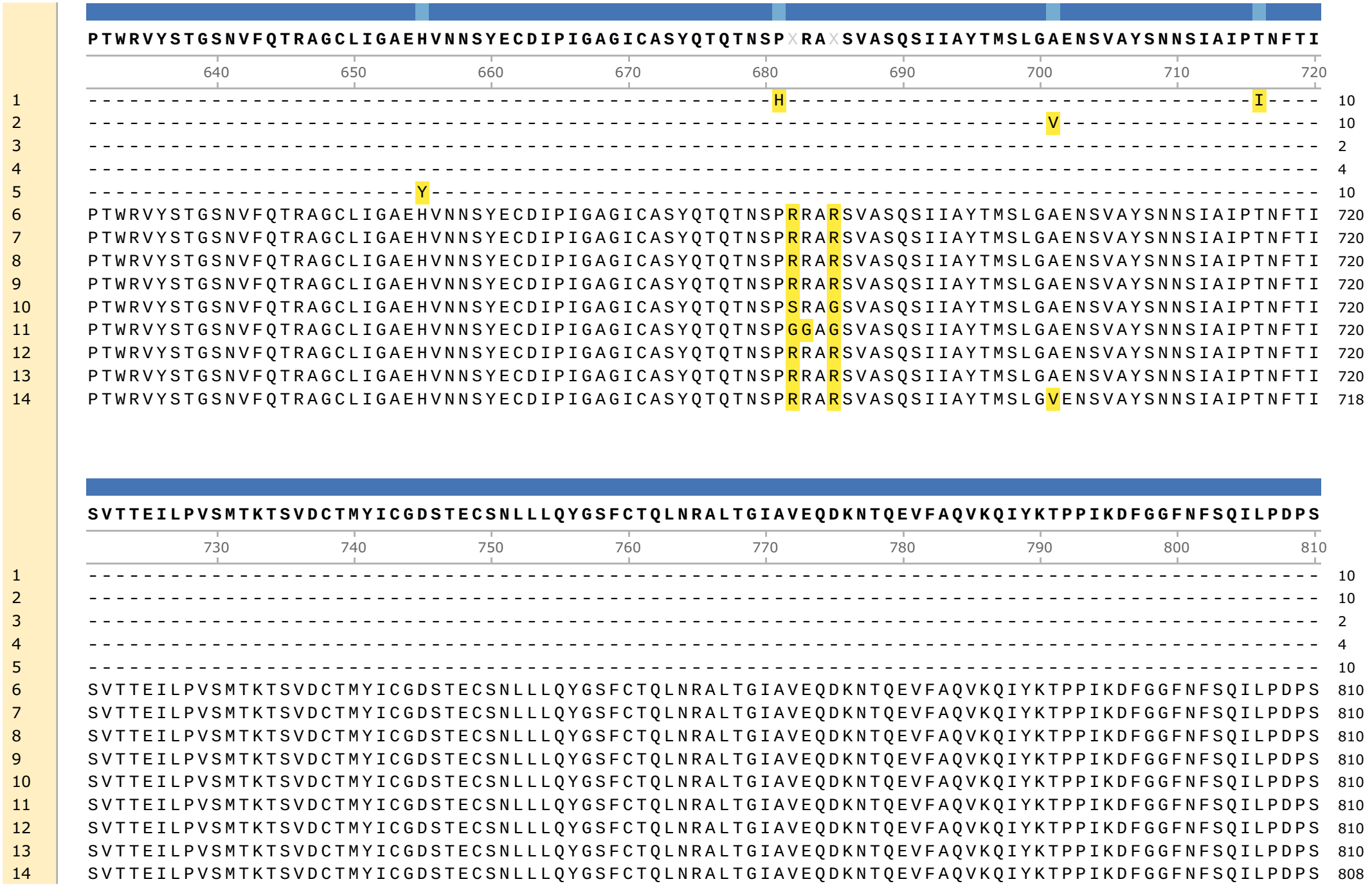
1 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - K - - - - - - - - - - P - - - - - - - Y - - - - - - - - - - - - - - - - - - -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4 4
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4 4
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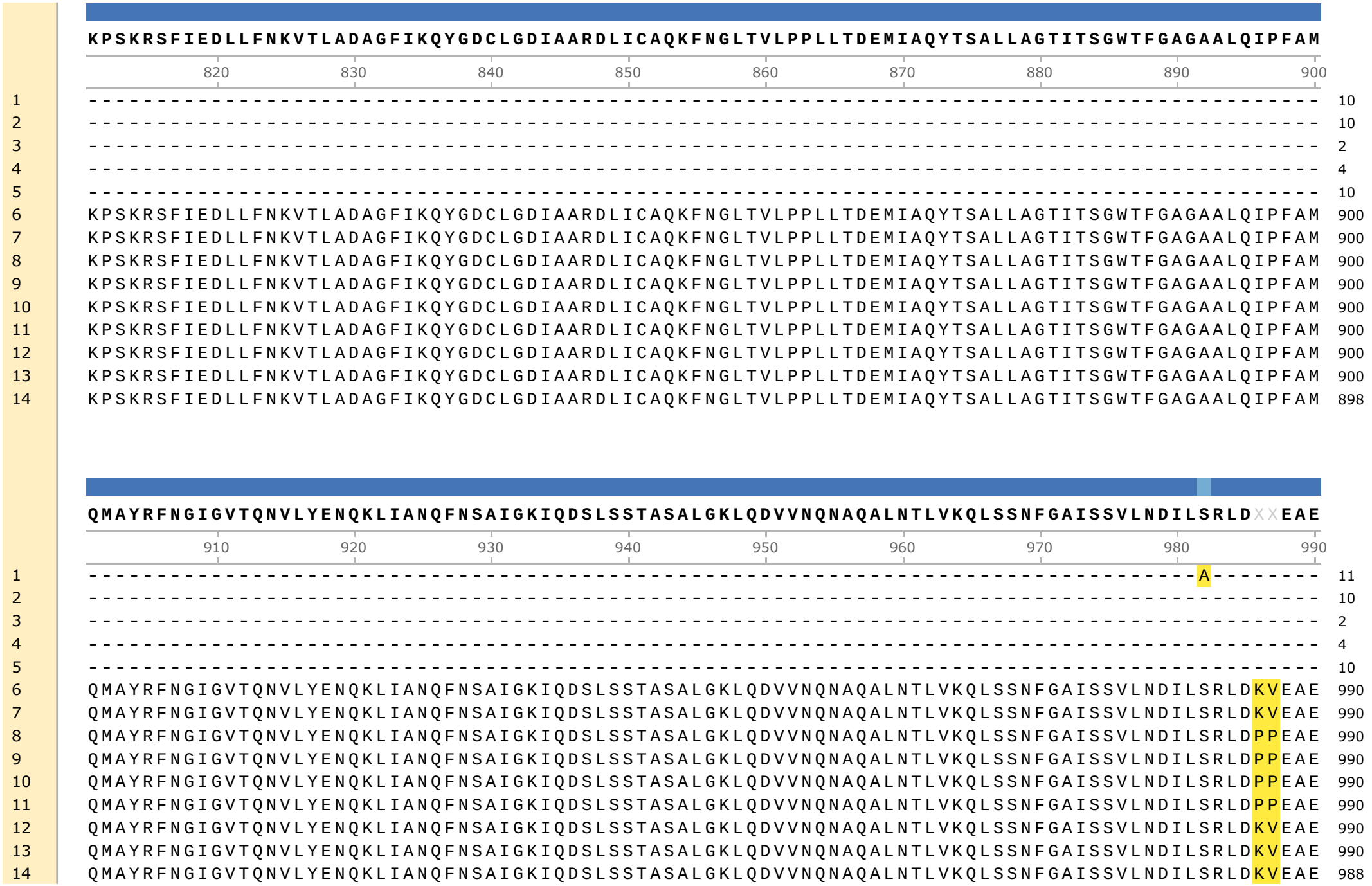
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5 ---------- 10
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2 ---------- 10
3 ---------- 2
4 ---------- 4
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1070
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3 ---------- 2
4 ---------- 4
5 ----------I---------- 11
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1170
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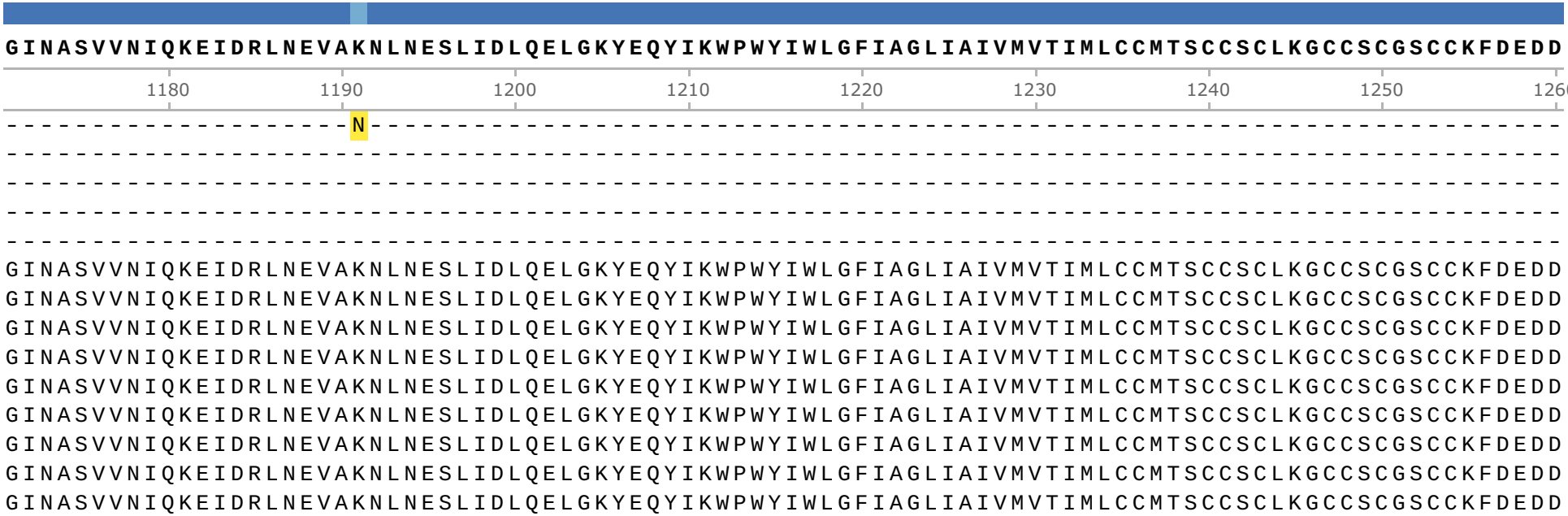
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4 ---------- 4
5 ---------- 11
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1270
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**Consensus Threshold:** >50%

**Compare to:** the consensus

Amino acids that don't match the reference are marked with yellow highlighting.

**Created:** 28 Jun 2021

**Last Modified:** 28 Jun 2021