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eolf-seql

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Cys Phe Arg Tyr Pro Thr Pro Gly Glu Ala Pro Gly Val Val Gly Asn
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Phe Asn Lys Ser Ile Val Ala Arg Leu Phe Ser Asp Ala Arg Arg Leu
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Leu Leu Tyr Ser Gln Lys Asp Thr Ser Met Lys Asp Met Arg Lys Val
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Gln Asp Phe Leu Val Asp Asn Glu Thr Phe Ser Gly Phe Leu Tyr His
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Ala Thr Lys Thr Leu Leu His Ser Leu Gly Thr Leu Ala Gln Glu Leu
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Ser Leu Asn Trp Tyr Glu Asp Asn Asn Tyr Lys Ala Leu Phe Gly Gly
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Asn Gly Thr Glu Glu Asp Ala Glu Thr Phe Tyr Asp Asn Ser Thr Thr
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Arg Ile Ile Trp Lys Ala Leu Lys Pro Leu Leu Val Gly Lys Ile Leu
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Ile Ala Thr Glu Val Trp Leu Ile Asn Lys Ser Met Glu Leu Leu Asp
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Glu Arg Lys Phe Trp Ala Gly Ile Val Phe Thr Gly Ile Thr Pro Gly
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Ser Ile Glu Leu Pro His His Val Lys Tyr Lys Ile Arg Met Asp Ile
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Asp Asn Val Glu Arg Thr Asn Lys Ile Lys Asp Gly Tyr Trp Asp Pro
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Gly Pro Arg Ala Asp Pro Phe Glu Asp Met Arg Tyr Val Trp Gly Gly
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Pro Leu Phe Met Thr Leu Ala Trp Ile Tyr Ser Val Ala Val Ile Ile
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Lys Gly Ile Val Tyr Glu Lys Glu Ala Arg Leu Lys Glu Thr Met Arg
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Ile Met Gly Leu Asp Asn Ser Ile Leu Trp Phe Ser Trp Phe Ile Ser
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Gln Tyr Gly Ile Pro Arg Pro Trp Tyr Phe Pro Cys Thr Lys Ser Tyr
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Trp Phe Gly Glu Glu Ser Asp Glu Lys Ser His Pro Gly Ser Asn Gln
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Lys Arg Ile Ser Glu Ile Cys Met Glu Glu Glu Pro Thr His Leu Lys
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Leu Gly Val Ser Ile Gln Asn Leu Val Lys Val Tyr Arg Asp Gly Met
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Lys Val Ala Val Asp Gly Leu Ala Leu Asn Phe Tyr Glu Gly Gln Ile
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Thr Ser Phe Leu Gly His Asn Gly Ala Gly Lys Thr Thr Thr Met Ser
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Ile Leu Thr Gly Leu Phe Pro Pro Thr Ser Gly Thr Ala Tyr Ile Leu
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Gly Lys Asp Ile Arg Ser Glu Met Ser Thr Ile Arg Gln Asn Leu Gly
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Val Cys Pro Gln His Asn Val Leu Phe Asp Met Leu Thr Val Glu Glu
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Gln Glu Val Asn Asp Ala Xaa Lys Gln Met Lys Lys His Leu Lys
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Leu Ala Lys Asp Ser Ser Ala Asp Arg Phe Leu Asn Ser Leu Gly
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Arg Phe Met Thr Gly Leu Asp Thr Arg Asn Asn Val Lys Val Trp
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Phe Asn Asn Lys Gly Trp His Ala Ile Ser Ser Phe Leu Asn Val
1595 1600 1605

Ile Asn Asn Ala Ile Leu Arg Ala Asn Leu Gln Lys Gly Glu Asn
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Pro Ser His Tyr Gly Ile Thr Ala Phe Asn His Pro Leu Asn Leu
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Thr Lys Gln Gln Leu Ser Glu Val Ala Xaa Met Thr Thr Ser Val
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Asp Val Leu Val Ser Ile Cys Val Ile Phe Ala Met Ser Phe Val
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Pro Ala Ser Phe Val Val Phe Leu Ile Gln Glu Arg Val Ser Lys
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Ala Lys His Leu Gln Phe Ile Ser Gly Val Lys Pro Val Ile Tyr
1685 1690 1695

Trp Leu Ser Asn Phe Val Trp Asp Met Cys Asn Tyr Val Val Pro
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Ala Thr Leu Val Ile Ile Ile Phe Ile Cys Phe Gln Gln Lys Ser
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Tyr Val Ser Ser Thr Asn Leu Pro Val Leu Ala Leu Leu Leu Leu
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Leu Tyr Gly Trp Ser Ile Thr Pro Leu Met Tyr Pro Ala Ser Phe
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Val Phe Lys Ile Pro Ser Thr Ala Tyr Val Val Leu Thr Ser Val
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Asn Leu Phe Ile Gly Ile Asn Gly Ser Val Ala Thr Phe Val Leu

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Glu Leu Phe Thr Asp Asn Lys Leu Asn Asn Ile Asn Asp Ile Leu
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Lys Ser Val Phe Leu Ile Phe Pro His Phe Cys Leu Gly Arg Gly
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Leu Ile Asp Met Val Lys Asn Gln Ala Met Ala Asp Ala Leu Glu
1820 1825 1830

Arg Phe Gly Glu Asn Arg Phe Val Ser Pro Leu Ser Trp Asp Leu
1835 1840 1845

Val Gly Arg Asn Leu Phe Ala Met Ala Val Glu Gly Val Val Phe
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Phe Leu Ile Thr Val Leu Ile Gln Tyr Arg Phe Phe Ile Arg Pro
1865 1870 1875

Arg Pro Val Asn Ala Lys Leu Ser Pro Leu Asn Asp Glu Asp Glu
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Asp Val Arg Arg Glu Arg Gln Arg Ile Leu Asp Gly Gly Gly Gln
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Asn Asp Ile Leu Glu Ile Lys Glu Leu Thr Lys Ile Tyr Arg Arg
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Lys Arg Lys Pro Ala Val Asp Arg Ile Cys Val Gly Ile Pro Pro
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Gly Glu Cys Phe Gly Leu Leu Gly Val Asn Gly Ala Gly Lys Ser
1940 1945 1950

Ser Thr Phe Lys Met Leu Thr Gly Asp Thr Thr Val Thr Arg Gly
1955 1960 1965

Asp Ala Phe Leu Asn Xaa Asn Ser Ile Leu Ser Asn Ile His Glu
1970 1975 1980

Val His Gln Asn Met Gly Tyr Cys Pro Gln Phe Asp Ala Ile Thr
1985 1990 1995

Glu Leu Leu Thr Gly Arg Glu His Val Glu Phe Phe Ala Leu Leu
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Arg Gly Val Pro Glu Lys Glu Val Gly Lys Val Gly Glu Trp Ala
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Ile Arg Lys Leu Gly Leu Val Lys Tyr Gly Glu Lys Tyr Ala Gly

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Asn Tyr Ser Gly Gly Asn Lys Arg Lys Leu Ser Thr Ala Met Ala
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Gly Met Asp Pro Lys Ala Arg Arg Phe Leu Trp Asn Cys Ala Leu
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Ser Val Val Lys Glu Gly Arg Ser Val Val Leu Thr Ser His Ser
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Met Glu Glu Cys Glu Ala Leu Cys Thr Arg Met Ala Ile Met Val
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Asn Gly Arg Phe Arg Cys Leu Gly Ser Val Gln His Leu Lys Asn
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Arg Phe Gly Asp Gly Tyr Thr Ile Val Val Arg Ile Ala Gly Ser
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Gln Leu Pro Ser Ser Leu Ser Ser Leu Ala Arg Ile Phe Ser Ile
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Ser Gln Thr Thr Leu Asp Gln Val Phe Val Asn Phe Ala Lys Asp
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Gln Ser Asp Asp Asp His Leu Lys Asp Leu Ser Leu His Lys Asn
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cagttactct gcagagatga cggagcccaa gtcggtgtgt gtctcggtgg atgaggtggt 180

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        35                  40                  45

Leu Asn Gly His Leu Lys Lys Val Asp Asn Asn Leu Thr Glu Ala Gln
    50                  55                  60

Arg Phe Ser Ser Leu Pro Arg Arg Ala Ala Val Asn Ile Glu Phe Arg
65                  70                  75                  80

Asp Leu Ser Tyr Ser Val Pro Glu Gly Pro Trp Trp Arg Lys Lys Gly
                85                  90                  95

Tyr Lys Thr Leu Leu Lys Gly Ile Ser Gly Lys Phe Asn Ser Gly Glu
            100                 105                 110
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Asn Ile Leu Ala Gly Tyr Arg Glu Thr Gly Met Lys Gly Ala Val Leu
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Ile Asn Gly Leu Pro Arg Asp Leu Arg Cys Phe Arg Lys Val Ser Cys
145                 150                 155                 160

Tyr Ile Met Gln Asp Asp Met Leu Leu Pro His Leu Thr Val Gln Glu
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Ala Met Met Val Ser Ala His Leu Lys Leu Gln Glu Lys Asp Glu Gly
            180                 185                 190

Arg Arg Glu Met Val Lys Glu Ile Leu Thr Ala Leu Gly Leu Leu Ser
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Cys Ala Asn Thr Arg Thr Gly Ser Leu Ser Gly Gly Gln Arg Lys Arg
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Leu Ala Ile Ala Leu Glu Leu Val Asn Asn Pro Pro Val Met Phe Phe
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Asp Glu Pro Thr Ser Gly Leu Asp Ser Ala Ser Cys Phe Gln Val Val
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Ser Leu Met Lys Gly Leu Ala Gln Gly Gly Arg Ser Ile Ile Cys Thr
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Ile His Gln Pro Ser Ala Lys Leu Phe Glu Leu Phe Asp Gln Leu Tyr
        275                 280                 285

Val Leu Ser Gln Gly Gln Cys Val Tyr Arg Gly Lys Val Cys Asn Leu
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Val Pro Tyr Leu Arg Asp Leu Gly Leu Asn Cys Pro Thr Tyr His Asn
305                 310                 315                 320

Pro Ala Asp Phe Val Met Glu Val Ala Ser Gly Glu Tyr Gly Asp Gln
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Asn Ser Arg Leu Val Arg Ala Val Arg Glu Gly Met Cys Asp Ser Asp
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His Lys Arg Asp Leu Gly Gly Asp Ala Glu Val Asn Pro Phe Leu Trp
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His Arg Pro Ser Glu Glu Val Lys Gln Thr Lys Arg Leu Lys Gly Leu
    370                 375                 380
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Arg Lys Asp Ser Ser Ser Met Glu Gly Cys His Ser Phe Ser Ala Ser
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Cys Leu Thr Gln Phe Cys Ile Leu Phe Lys Arg Thr Phe Leu Ser Ile
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Met Arg Asp Ser Val Leu Thr His Leu Arg Ile Thr Ser His Ile Gly
            420                 425                 430

Ile Gly Leu Leu Ile Gly Leu Leu Tyr Leu Gly Ile Gly Asn Glu Ala
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Lys Lys Val Leu Ser Asn Ser Gly Phe Leu Phe Phe Ser Met Leu Phe
    450                 455                 460

Leu Met Phe Ala Ala Leu Met Pro Thr Val Leu Thr Phe Pro Leu Glu
465                 470                 475                 480

Met Gly Val Phe Leu Arg Glu His Leu Asn Tyr Trp Tyr Ser Leu Lys
                485                 490                 495

Ala Tyr Tyr Leu Ala Lys Thr Met Ala Asp Val Pro Phe Gln Ile Met
            500                 505                 510

Phe Pro Val Ala Tyr Cys Ser Ile Val Tyr Trp Met Thr Ser Gln Pro
        515                 520                 525

Ser Asp Ala Val Arg Phe Val Leu Phe Ala Ala Leu Gly Thr Met Thr
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Ser Leu Val Ala Gln Ser Leu Gly Leu Leu Ile Gly Ala Ala Ser Thr
545                 550                 555                 560

Ser Leu Gln Val Ala Thr Phe Val Gly Pro Val Thr Ala Ile Pro Val
                565                 570                 575

Leu Leu Phe Ser Gly Phe Phe Val Ser Phe Asp Thr Ile Pro Thr Tyr
            580                 585                 590

Leu Gln Trp Met Ser Tyr Ile Ser Tyr Val Arg Tyr Gly Phe Glu Gly
        595                 600                 605

Val Ile Leu Ser Ile Tyr Gly Leu Asp Arg Glu Asp Leu His Cys Asp
    610                 615                 620

Ile Asp Glu Thr Cys His Phe Gln Lys Ser Glu Ala Ile Leu Arg Glu
625                 630                 635                 640

Leu Asp Val Glu Asn Ala Lys Leu Tyr Leu Asp Phe Ile Val Leu Gly
                645                 650                 655
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eolf-seql

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Lys Ile Arg Ala Glu Arg
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Pro Pro Tyr Ala Gly Ser Gly Ala Gly Gly Thr Asp Pro Ala Ser Pro
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Asp Thr Ser Ser Pro Gly Ser Leu Ser Pro Pro Pro Ala Thr Leu Ser
65 70 75 80

Ser Ser Leu Glu Ala Phe Leu Ser Gly Pro Gln Ala Ala Pro Ser Pro
85 90 95

Leu Ser Pro Pro Gln Pro Ala Pro Thr Pro Leu Lys Met Tyr Pro Ser
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Met Pro Ala Phe Ser Pro Gly Pro Gly Ile Lys Glu Glu Ser Val Pro
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Leu Pro Gln Ser Phe Pro Ala Pro Ala Pro Pro Gln Phe Ser Ser Thr
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Pro Pro Gly Asn Thr Gln Gln Pro Leu Pro Gly Leu Pro Leu Ala Ser
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Pro Pro Gly Val Pro Pro Val Ser Leu His Thr Gln Val Gln Ser Val
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Val Thr Thr Thr Val Thr Ser Gln Ile Gln Gln Val Pro Val Leu Leu
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Gln Pro His Phe Ile Lys Ala Asp Ser Leu Leu Leu Thr Ala Met Lys
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Thr Asp Gly Ala Thr Val Lys Ala Ala Gly Leu Ser Pro Leu Val Ser
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Gly Thr Thr Val Gln Thr Gly Pro Leu Pro Thr Leu Val Ser Gly Gly
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305                 310                 315                 320

Arg Gly Glu Lys Arg Thr Ala His Asn Ala Ile Glu Lys Arg Tyr Arg
                325                 330                 335

Ser Ser Ile Asn Asp Lys Ile Ile Glu Leu Lys Asp Leu Val Val Gly
            340                 345                 350

Thr Glu Ala Lys Leu Asn Lys Ser Ala Val Leu Arg Lys Ala Ile Asp
        355                 360                 365

Tyr Ile Arg Phe Leu Gln His Ser Asn Gln Lys Leu Lys Gln Glu Asn
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Leu Ser Leu Arg Thr Ala Val His Lys Ser Lys Ser Leu Lys Asp Leu
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Val Ser Ala Cys Gly Ser Gly Gly Asn Thr Asp Val Leu Met Glu Gly
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Val Lys Thr Glu Val Glu Asp Thr Leu Thr Pro Pro Pro Ser Asp Ala
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Glu Asp Ser Lys Ala Lys Pro Glu Gln Arg Pro Ser Leu His Ser Arg
465                 470                 475                 480

Gly Met Leu Asp Arg Ser Arg Leu Ala Leu Cys Thr Leu Val Phe Leu
                485                 490                 495

Cys Leu Ser Cys Asn Pro Leu Ala Ser Leu Leu Gly Ala Arg Gly Leu
            500                 505                 510

Pro Ser Pro Ser Asp Thr Thr Ser Val Tyr His Ser Pro Gly Arg Asn
        515                 520                 525

Val Leu Gly Thr Glu Ser Arg Asp Gly Pro Gly Trp Ala Gln Trp Leu
    530                 535                 540

Leu Pro Pro Val Val Trp Leu Leu Asn Gly Leu Leu Val Leu Val Ser
545                 550                 555                 560

Leu Val Leu Leu Phe Val Tyr Gly Glu Pro Val Thr Arg Pro His Ser
                565                 570                 575

Gly Pro Ala Val Tyr Phe Trp Arg His Arg Lys Gln Ala Asp Leu Asp
            580                 585                 590

Leu Ala Arg Gly Asp Phe Ala Gln Ala Ala Gln Gln Leu Trp Leu Ala
        595                 600                 605

Leu Arg Ala Leu Gly Arg Pro Leu Pro Thr Ser His Leu Asp Leu Ala
    610                 615                 620

Cys Ser Leu Leu Trp Asn Leu Ile Arg His Leu Leu Gln Arg Leu Trp
625                 630                 635                 640

Val Gly Arg Trp Leu Ala Gly Arg Ala Gly Gly Leu Gln Gln Asp Cys
                645                 650                 655

Ala Leu Arg Val Asp Ala Ser Ala Ser Ala Arg Asp Ala Ala Leu Val
            660                 665                 670

Tyr His Lys Leu His Gln Leu His Thr Met Gly Lys His Thr Gly Gly
        675                 680                 685

His Leu Thr Ala Thr Asn Leu Ala Leu Ser Ala Leu Asn Leu Ala Glu
    690                 695                 700
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Cys Ala Gly Asp Ala Val Ser Val Ala Thr Leu Ala Glu Ile Tyr Val
705                 710                 715                 720

Ala Ala Ala Leu Arg Val Lys Thr Ser Leu Pro Arg Ala Leu His Phe
                725                 730                 735

Leu Thr Arg Phe Phe Leu Ser Ser Ala Arg Gln Ala Cys Leu Ala Gln
            740                 745                 750

Ser Gly Ser Val Pro Pro Ala Met Gln Trp Leu Cys His Pro Val Gly
        755                 760                 765

His Arg Phe Phe Val Asp Gly Asp Trp Ser Val Leu Ser Thr Pro Trp
    770                 775                 780

Glu Ser Leu Tyr Ser Leu Ala Gly Asn Pro Val Asp Pro Leu Ala Gln
785                 790                 795                 800

Val Thr Gln Leu Phe Arg Glu His Leu Leu Glu Arg Ala Leu Asn Cys
                805                 810                 815

Val Thr Gln Pro Asn Pro Ser Pro Gly Ser Ala Asp Gly Asp Lys Glu
            820                 825                 830

Phe Ser Asp Ala Leu Gly Tyr Leu Gln Leu Leu Asn Ser Cys Ser Asp
        835                 840                 845

Ala Ala Gly Ala Pro Ala Tyr Ser Phe Ser Ile Ser Ser Ser Met Ala
    850                 855                 860

Thr Thr Thr Gly Val Asp Pro Val Ala Lys Trp Trp Ala Ser Leu Thr
865                 870                 875                 880

Ala Val Val Ile His Trp Leu Arg Arg Asp Glu Glu Ala Ala Glu Arg
                885                 890                 895

Leu Cys Pro Leu Val Glu His Leu Pro Arg Val Leu Gln Glu Ser Glu
            900                 905                 910

Arg Pro Leu Pro Arg Ala Ala Leu His Ser Phe Lys Ala Ala Arg Ala
        915                 920                 925

Leu Leu Gly Cys Ala Lys Ala Glu Ser Gly Pro Ala Ser Leu Thr Ile
    930                 935                 940

Cys Glu Lys Ala Ser Gly Tyr Leu Gln Asp Ser Leu Ala Thr Thr Pro
945                 950                 955                 960

Ala Ser Ser Ser Ile Asp Lys Ala Val Gln Leu Phe Leu Cys Asp Leu
                965                 970                 975
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Leu Leu Val Val Arg Thr Ser Leu Trp Arg Gln Gln Gln Pro Pro Ala
            980                 985                 990

Pro Ala Pro Ala Ala Gln Gly Thr  Ser Ser Arg Pro Gln  Ala Ser Ala
        995                 1000                1005

Leu Glu  Leu Arg Gly Phe Gln  Arg Asp Leu Ser Ser  Leu Arg Arg
    1010                1015                1020

Leu Ala  Gln Ser Phe Arg Pro  Ala Met Arg Arg Val  Phe Leu His
    1025                1030                1035

Glu Ala  Thr Ala Arg Leu Met  Ala Gly Ala Ser Pro  Thr Arg Thr
    1040                1045                1050

His Gln  Leu Leu Asp Arg Ser  Leu Arg Arg Arg Ala  Gly Pro Gly
    1055                1060                1065

Gly Lys  Gly Gly Ala Val Ala  Glu Leu Glu Pro Arg  Pro Thr Arg
    1070                1075                1080

Arg Glu  His Ala Glu Ala Leu  Leu Leu Ala Ser Cys  Tyr Leu Pro
    1085                1090                1095

Pro Gly  Phe Leu Ser Ala Pro  Gly Gln Arg Val Gly  Met Leu Ala
    1100                1105                1110

Glu Ala  Ala Arg Thr Leu Glu  Lys Leu Gly Asp Arg  Arg Leu Leu
    1115                1120                1125

His Asp  Cys Gln Gln Met Leu  Met Arg Leu Gly Gly  Gly Thr Thr
    1130                1135                1140

Val Thr  Ser Ser
    1145
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