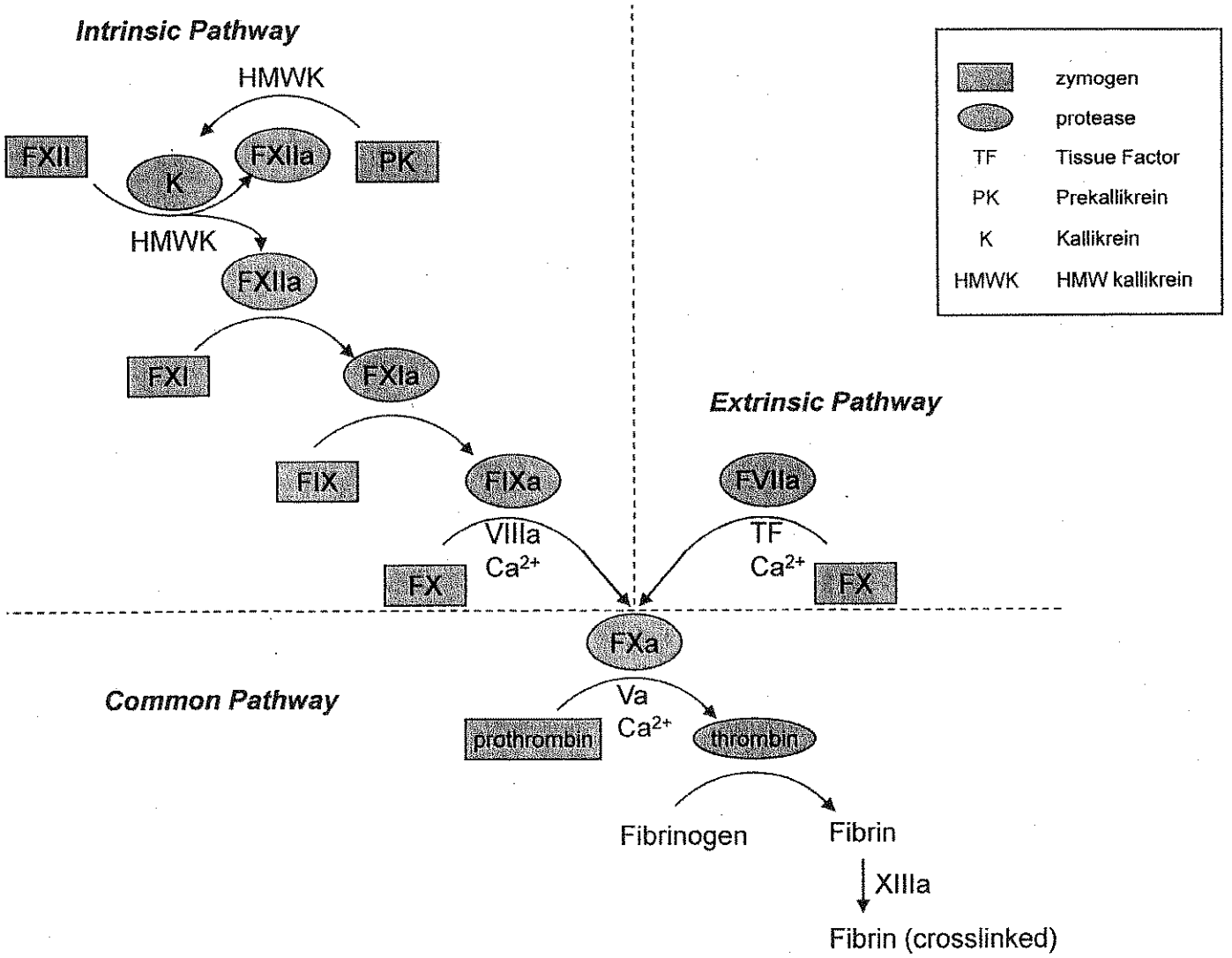


Figure 1. Coagulation cascade

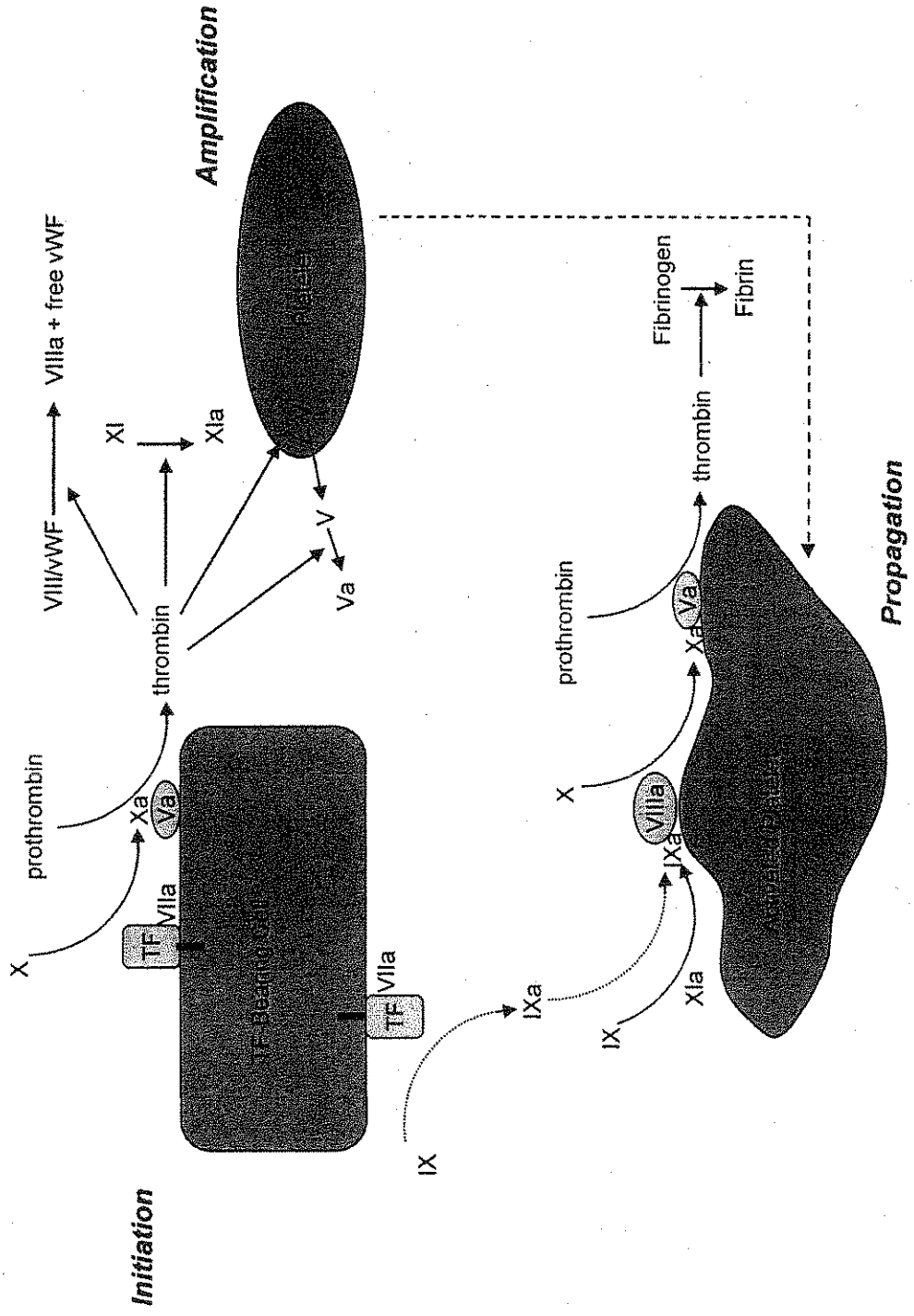


Figure 2. Cell-based model of coagulation

```
SEQ ID NO:20        ----------------------------------------------YNSGKLEEFVQGNL  14
SEQ ID NO:325       MQRVNMIMAESPGLITICLLGYLLSAECTVFLDHENANKILNRPKRYNSGKLEEFVQGNL  60
SEQ ID NO:2         MQRVNMIMAESPGLITICLLGYLLSAECTVFLDHENANKILNRPKRYNSGKLEEFVQGNL  60
SEQ ID NO:3         ----------------------------------------------YNSGKLEEFVQGNL  14
SEQ ID NO:4         MQRVNMIMAESPGLITICLLGYLLSAECTVFLDHENANKILNRPKRYNSGKLEEFVQGNL  60
SEQ ID NO:267       ----------------------------------------------YNSGKLEEFVQGNL  14
SEQ ID NO:366       ----------------------------------------------YNSGKLEEFVQGNL  14
SEQ ID NO:360       ----------------------------------------------YNSGKLEEFVQGNL  14
SEQ ID NO:406       ----------------------------------------------YNSGKLEEFVQGNL  14
SEQ ID NO:346       ----------------------------------------------YNSGKLEEFVQGNL  14
SEQ ID NO:172       ----------------------------------------------YNSGKLEEFVQGNL  14
SEQ ID NO:347       ----------------------------------------------YNSGKLEEFVQGNL  14
SEQ ID NO:365       ----------------------------------------------YNSGKLEEFVQGNL  14
7,700,734           ----------------------------------------------YNSGKLEEFVQGNL  14
7,125,841           MQRVNMIMAESPSLITICLLGYLLSAECTVFLDHENANKILNRPKRYNSGKLEEFVQGNL  60
SEQ ID NO:5         MQRVNMIMAESPGLITICLLGYLLSAECTVFLDHENANKILNRPKRYNSGKLEEFVQGNL  60
SEQ ID NO:14        ----------------------------------------------YNSGKLEEFVRGNL  14
                                                                  **********:***

SEQ ID NO:20        ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
SEQ ID NO:325       ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP 120
SEQ ID NO:2         ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP 120
SEQ ID NO:3         ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
SEQ ID NO:4         ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP 120
SEQ ID NO:267       ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
SEQ ID NO:366       ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
SEQ ID NO:360       ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
SEQ ID NO:406       ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
SEQ ID NO:346       ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
SEQ ID NO:172       ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
SEQ ID NO:347       ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
SEQ ID NO:365       ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
7,700,734           ERECMEEKCSFEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP  74
7,125,841           ERECMEEKCSFEEPREVFENTEKITEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP 120
SEQ ID NO:5         ERECMEEKCNFEEAREVFENTEKTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCP 120
SEQ ID NO:14        ERECKEEKCSFEEAREVFENTEKTTEFWKQYVDGDQCESNPCLNGGMCKDDINSYECWCQ  74
                    **** ****.***.********: ********************** ************
```

Figure 3

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SEQ ID NO:20        FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
SEQ ID NO:325       FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 180
SEQ ID NO:2         FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 180
SEQ ID NO:3         FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
SEQ ID NO:4         FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 180
SEQ ID NO:267       FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
SEQ ID NO:366       FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
SEQ ID NO:360       FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
SEQ ID NO:406       FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
SEQ ID NO:346       FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
SEQ ID NO:172       FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
SEQ ID NO:347       FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
SEQ ID NO:365       FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
7,700,734           FGFEGKNCELDATCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 134
7,125,841           FGFEGKNCELDVTCNIKNGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGR 180
SEQ ID NO:5         FGFEGKNCELDVTCNIKNGRCKQFCKNTADNKVVCSCTEGYRLAENQRSCEPAVPFPCGR 180
SEQ ID NO:14        AGFEGTNCELDATCSIKNGRCKQFCKRDTDNKVVCSCTDGYRLAEDQKSCEPAVPFPCGR 134
                     ****.*****.**.******:****. :*********:******:*:************

SEQ ID NO:20        VSVSQTS-KLTRAEAVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
SEQ ID NO:325       VSVSQTS-KLTRAEAVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 239
SEQ ID NO:2         VSVSQTS-KLTRAETVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 239
SEQ ID NO:3         VSVSQTS-KLTRAETVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
SEQ ID NO:4         VSVSQTS-KLTRAETVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 239
SEQ ID NO:267       VSVSQTS-KLTRAETVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
SEQ ID NO:366       VSVSQTS-KLTRAETVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
SEQ ID NO:360       VSVSQTS-KLTRAETVFPDVDFVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
SEQ ID NO:406       VSVSQTS-KLTRAETVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
SEQ ID NO:346       VSVSQTS-KLTRAETVFPDVDFVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
SEQ ID NO:172       VSVSQTS-KLTRAETVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
SEQ ID NO:347       VSVSQTS-KLTRAETVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
SEQ ID NO:365       VSVSQTS-KLTRAETVFPDVDFVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
7,700,734           VSVSQTS-KLTRAETVFPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 193
7,125,841           VSVSQTS-KLTRAEAVFPDVDYVNPTEAETILDNITQGTQSFNDFTRVVGGEDAKPGQFP 239
SEQ ID NO:5         VSVSQTS-TLTRAETVFPDVEYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 239
SEQ ID NO:14        VSVSHISKKLTRAETIFSNTNYENSSEAEIIWDNVTQSNQSFDEFSRVVGGEDAERGQFP 194
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```

Figure 3

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SEQ ID NO:20        WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIR- 252
SEQ ID NO:325       WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIR- 298
SEQ ID NO:2         WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIR- 298
SEQ ID NO:3         WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIR- 252
SEQ ID NO:4         WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVDTGVKITVVAGEHNIEETEHTEQKRNVIR- 298
SEQ ID NO:267       WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIR- 252
SEQ ID NO:366       WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIR- 252
SEQ ID NO:360       WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVNITVVAGEHNIEETEHTEQNRSVIR- 252
SEQ ID NO:406       WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVNITVVAGEHNIEETEHTEQNRSVIR- 252
SEQ ID NO:346       WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIR- 252
SEQ ID NO:172       WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIR- 252
SEQ ID NO:347       WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIR- 252
SEQ ID NO:365       WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVSR- 252
7,700,734           WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIR- 252
7,125,841           WQVVLNGKVDAFCGGSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIRA 299
SEQ ID NO:5         WQVVLNGKVDAFCGGSIVNEKWVVTAAHCVETDAKITVVAGEHNIEETEHTEQKRNVIR- 298
SEQ ID NO:14        WQVLLHGEIAAFCGGSIVNEKWVVTAAHCIKPGVKITVVAGEHNTEKPEPTEQKRNVIR- 253
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SEQ ID NO:20        IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
SEQ ID NO:325       IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 358
SEQ ID NO:2         IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 358
SEQ ID NO:3         IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
SEQ ID NO:4         IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 358
SEQ ID NO:267       IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
SEQ ID NO:366       IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
SEQ ID NO:360       IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
SEQ ID NO:406       IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
SEQ ID NO:346       IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
SEQ ID NO:172       IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
SEQ ID NO:347       IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
SEQ ID NO:365       IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
7,700,734           IIPHHNYNAAINKYNHDIALLELDAPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 312
7,125,841           IIPHHNYNAAINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWAR 359
SEQ ID NO:5         IIPHHNYNATINKYNHDIALLELDEPLVLNSYVTPICIADKEYTNIFLKFGSGYVSGWGR 358
SEQ ID NO:14        AIPYHSYNASINKYSHDIALLELDEPLELNSYVTPICIADRDYTNIFSKFGYGYVSGWGK 313
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Figure 3

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SEQ ID NO:20        VFHKGRSALVLQYLRVPLVDRATCLRSTKFTIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
SEQ ID NO:325       VFHKGRSALVLQYLRVPLVDRATCLRSTKFTIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 418
SEQ ID NO:2         VFHKGRSALVLQYLRVPLVDRATCLRSTKFTIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 418
SEQ ID NO:3         VFHKGRSALVLQYLRVPLVDRATCLRSTKFTIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
SEQ ID NO:4         VFHKGRSALVLQYLRVPLVDRATCLRSTKFTIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 418
SEQ ID NO:267       VFHKGYSALVLQYLRVPLVDRATCLESTKFRIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
SEQ ID NO:366       VFHKGYSALVLQYLRVPLVDRATCLESTKFRIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
SEQ ID NO:360       VFHKGYSALVLQYLRVPLVDRATCLESTKFRIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
SEQ ID NO:406       VFHKGYSALVLQYLRVPLVDRATCLESTKFRIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
SEQ ID NO:346       VFHKGYSALVLQYLRVPLVDRATCLESTKFRIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
SEQ ID NO:172       VFHKGYSALVLQYLRVPLVDRATCLESTKFTIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
SEQ ID NO:347       VFHKGYSALVLQYLRVPLVDRATCLESTKFRIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
SEQ ID NO:365       VFHKGRSALVLQYLRVPLVDRATCLESTKFRIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
7,700,734           VFHKGRSALVLQYLRVPLVDRATCLASTKFTIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 372
7,125,841           VFHKGRSALVLQYLRVPLVDRATCLRSTKFTIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 419
SEQ ID NO:5         VFNKGRSASVLQYLRVPLVDRATCLRSTKFTIYNNMFCAGFHEGGRDSCQGDSGGPHVTE 418
SEQ ID NO:14        VFNRGRSASILQYLKVPLVDRATCLRSTKFSIYSHMFCAGYHEGGKDSCQGDSGGPHVTE 373
                    **::*** **  :****:**********.****  **.:*****:****:**************

SEQ ID NO:20        VEGTSFLTGIISWGEECAMKGKYGIYTKVSRYVNWIKEKTKLT 415
SEQ ID NO:325       VEGTSFLTGIISWGEECAMKGKYGIYTKVSRYVNWIKEKTKLT 461
SEQ ID NO:2         VEGTSFLTGIISWGEECAMKGKYGIYTKVSRYVNWIKEKTKLT 461
SEQ ID NO:3         VEGTSFLTGIISWGEECAMKGKYGIYTKVSRYVNWIKEKTKLT 415
SEQ ID NO:4         VEGTSFLTGIISWGEECAMKGKYGIYTKVSRYVNWIKEKTKLT 461
SEQ ID NO:267       VEGTSFLTGIISWGEECAMKGKYGIYTKVSEYVNWIKNKTKLT 415
SEQ ID NO:366       VEGTSFLTGIISWGEECAMKGKYGIYTKVSEYVNWIKSKTKLT 415
SEQ ID NO:360       VEGTSFLTGIISWGEECAMKGKYGIYTKVSEYVNWIKNKTKLT 415
SEQ ID NO:406       VEGTSFLTGIISWGEECAMKGKYGIYTKVSEYVNWIKEKTKLT 415
SEQ ID NO:346       VEGTSFLTGIISWGEECAMKGKYGIYTKVSEYVNWIKEKTKLT 415
SEQ ID NO:172       VEGTSFLTGIISWGEECAMKGKYGIYTKVSEYVNWIKNKTKLT 415
SEQ ID NO:347       VEGTSFLTGIISWGEECAMKGKYGIYTKVSRYVNWIKNKTKLT 415
SEQ ID NO:365       VEGTSFLTGIISWGEECAMKGKYGIYTKVSEYVNWIKEKTKLT 415
7,700,734           VEGTSFLTGIISWGEECAMKGKYGIYTKVSRYVNWIKEKTKLT 415
7,125,841           VEGTSFLTGIISWGEECAMKGKYGIYTKVSRYVNWIKEKTKLT 462
SEQ ID NO:5         VEGTSFLTGIISWGEECAMKGKYGIYTKVSRYVNWIKEKTKLT 461
SEQ ID NO:14        VEGTSFLTGIISWGEECAMKGKYGIYTKVSRYVNWIKEKTKLT 416
                    ********************************.******.*****
```

Figure 3