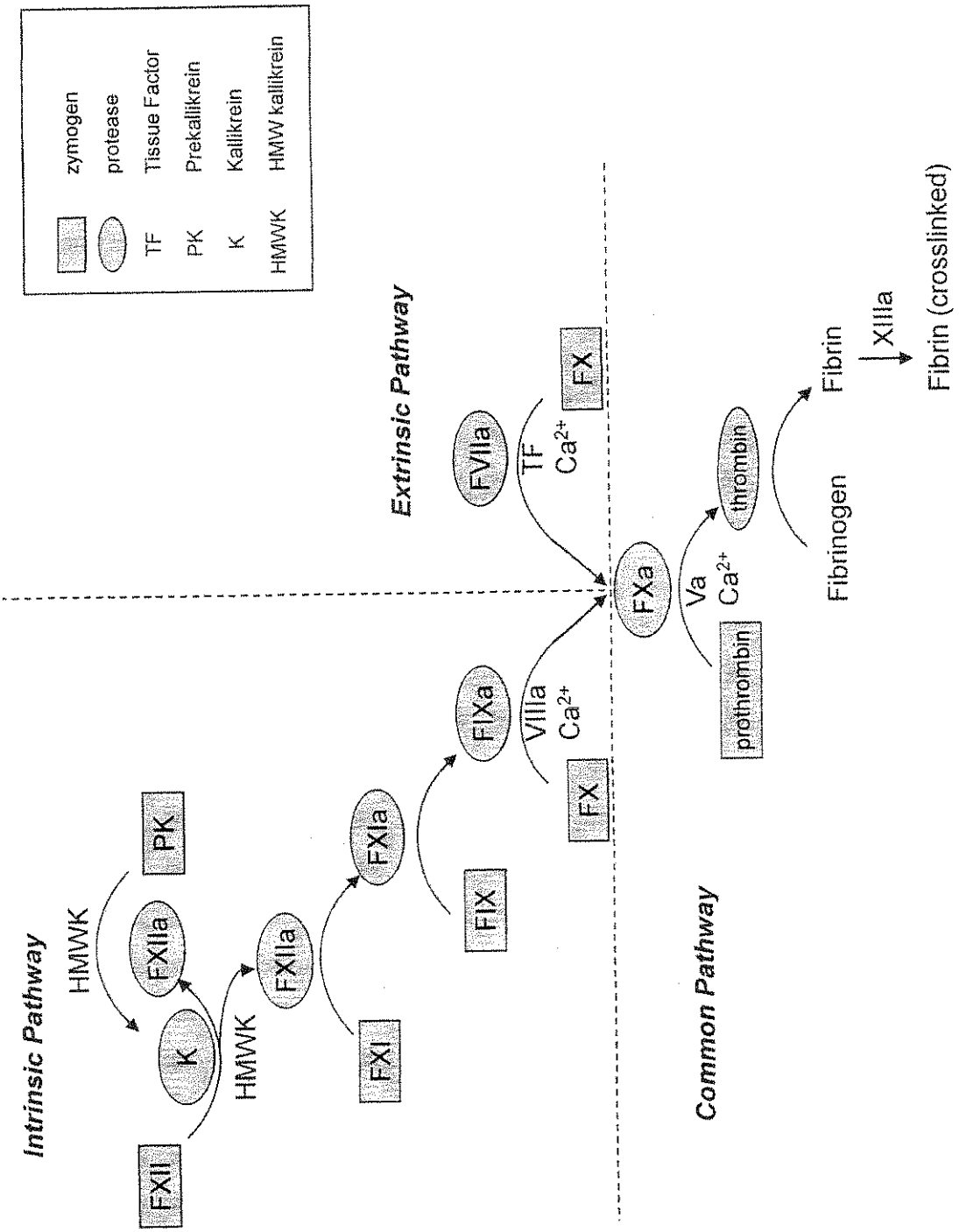


Figure 1. Coagulation cascade

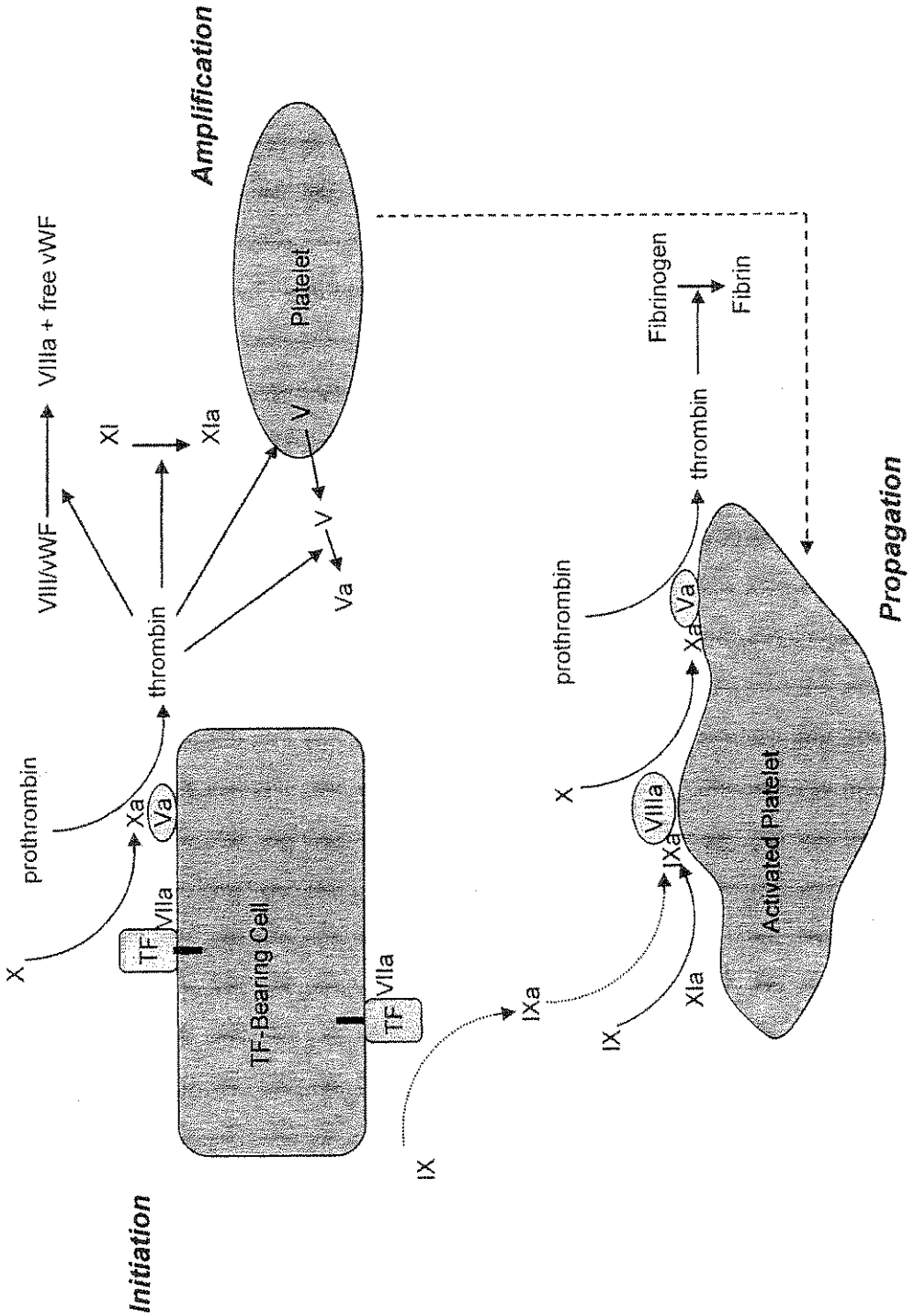


Figure 2. Cell-based model of coagulation

```
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

```
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-KLTRAEAVFPDVDYVNPTEAETILDNITQGTQSFNDFTRVVGGEDAKPGQFP 239
7,125,841         VSVSQTS-TLTRAETVFPDVEYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFP 239
SEQ ID NO:5       VSVSHISKKLTRAETIFSNTNYENSSEAEIIWDNVTQSNQSFDEFSRVVGGEDAERGQFP 194
                  *****:  *  .*****::*.:.::  * .:***  *  **:**. .***:*:*:**********:  ****
```

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