

**Table S1.** Acceptable range of results outlined by the Hellenic Cord Blood Bank for processing and storage of cord blood units.

| <b>Criteria</b>                    | <b>Unrelated Allogeneic</b>       | <b>Related Allogeneic</b>         |
|------------------------------------|-----------------------------------|-----------------------------------|
| <b>Collection bag mixed weight</b> | 120 – 280 gr                      | 100 – 220 gr                      |
| <b>WBC absolute count</b>          | 120 – 250 x 10 <sup>7</sup> cells | 100 – 250 x 10 <sup>7</sup> cells |
| <b>WBC concentration</b>           | 13 – 29.5 cells/μL                | 10 – 29.5 cells/μL                |
| <b>Cell Viability</b>              | 85 – 100%                         | 85 – 100%                         |

**Table S2.** List of proteins for identification with LC/MRM.

| No. | GROWTH FACTORS | ENTRY NAME  | ACCESSION NUMBER       |
|-----|----------------|-------------|------------------------|
| 1   | TNF-A          | TNFA_HUMAN  | <a href="#">P01375</a> |
| 2   | IL-1A          | IL1A_HUMAN  | <a href="#">P01583</a> |
| 3   | IL-1B          | IL1B_HUMAN  | <a href="#">P01584</a> |
| 4   | IL-2           | IL2_HUMAN   | <a href="#">P60568</a> |
| 5   | IL-6           | IL6_HUMAN   | <a href="#">P05231</a> |
| 6   | IL-7           | IL7_HUMAN   | <a href="#">P13232</a> |
| 7   | IL-8           | IL8_HUMAN   | <a href="#">P10145</a> |
| 8   | IL-10          | IL10_HUMAN  | <a href="#">P22301</a> |
| 9   | TRADD          | TRADD_HUMAN | <a href="#">Q15628</a> |
| 10  | IL-1R          | IL1R1_HUMAN | <a href="#">P14778</a> |
| 11  | IL-2GR         | IL2RG_HUMAN | <a href="#">P31785</a> |
| 12  | IL-6R          | IL6RA_HUMAN | <a href="#">P08887</a> |
| 13  | IL-7R          | IL7RA_HUMAN | <a href="#">P16871</a> |
| 14  | IL-8R          | CXCR2_HUMAN | <a href="#">P25025</a> |
| 15  | IL-10R1        | I10R1_HUMAN | <a href="#">Q13651</a> |
| 16  | IL-10R2        | I10R2_HUMAN | <a href="#">Q08334</a> |
| 17  | VEGF-A         | VEGFA_HUMAN | <a href="#">P15692</a> |
| 18  | SVCAM-1        | VCAM1_HUMAN | <a href="#">P19320</a> |
| 19  | SICAM-1        | ICAM1_HUMAN | <a href="#">P05362</a> |
| 20  | PDGF-AA        | PDGFA_HUMAN | <a href="#">P04085</a> |
| 21  | TGF-B1         | TGFB1_HUMAN | <a href="#">P01137</a> |
| 22  | FGF2           | FGF2_HUMAN  | <a href="#">P09038</a> |
| 23  | CCR1           | CCR1_HUMAN  | <a href="#">P32246</a> |
| 24  | TGF-B R2       | TGFR2_HUMAN | <a href="#">P37173</a> |
| 25  | TGF-B R1       | TGFR1_HUMAN | <a href="#">P36897</a> |
| 26  | MMP-1          | MMP1_HUMAN  | <a href="#">P03956</a> |
| 27  | MMP-2          | MMP2_HUMAN  | <a href="#">P08253</a> |
| 28  | MMP-3          | MMP3_HUMAN  | <a href="#">P08254</a> |
| 29  | TIMP1          | TIMP1_HUMAN | <a href="#">P01033</a> |
| 30  | TIMP2          | TIMP2_HUMAN | <a href="#">P16035</a> |
| 31  | TIMP3          | TIMP3_HUMAN | <a href="#">P35625</a> |

**Table S3.** WBCs and RBCs prior and after processing. \* The values are represented as median. † The values are represented as mean ± sd.

| n=40/group                                      | Group A<br>(< 81 ml) | Group B<br>(82-110 ml) | Group C<br>(111-148 ml) | Group D-Pooled<br>(111-148 ml) | <i>p value</i> |
|-------------------------------------------------|----------------------|------------------------|-------------------------|--------------------------------|----------------|
| <b>Initial WBCs</b><br>(x 10 <sup>3</sup> / µl) | (7)<br>7 ± 1         | (8)<br>8 ± 1           | (8)<br>8 ± 2            | (8)<br>8 ± 1                   | ns             |
| <b>Initial RBCs</b><br>(x 10 <sup>6</sup> )     | (3)<br>3 ± 1         | (3)<br>3 ± 1           | (3)<br>4 ± 1            | (4)<br>4 ± 1                   | ns             |
| <b>Final WBCs</b><br>(x 10 <sup>3</sup> / µl)   | (3)<br>4 ± 2         | (4)<br>4 ± 1           | (4)<br>4 ± 1            | (4)<br>4 ± 1                   | ns             |
| <b>Final RBCs</b><br>(x 10 <sup>6</sup> / µl)   | << 1                 | << 1                   | << 1                    | << 1                           | ns             |

**Table S4.** List of parent ions and fragments used in MRM analysis of PB-PL and CB-PL growth factors.

| Parent Ion (m/z) (z=1) | Fragment ion (m/z) | Fragment ion information                           |
|------------------------|--------------------|----------------------------------------------------|
| 565,296027             | 888,442137         | sp P09919 CSF3_HUMAN.IQGDGAALQEK.+2y9.light        |
| 565,296027             | 716,39373          | sp P09919 CSF3_HUMAN.IQGDGAALQEK.+2y7.light        |
| 565,296027             | 588,335152         | sp P09919 CSF3_HUMAN.IQGDGAALQEK.+2y5.light        |
| 565,296027             | 517,298038         | sp P09919 CSF3_HUMAN.IQGDGAALQEK.+2y4.light        |
| 565,296027             | 508,753995         | sp P09919 CSF3_HUMAN.IQGDGAALQEK.+2y10+2.light     |
| 761,896637             | 1031,547999        | sp P01579 IFNG_HUMAN.LTNYSVTDLNVQR.+2y9.light      |
| 761,896637             | 944,51597          | sp P01579 IFNG_HUMAN.LTNYSVTDLNVQR.+2y8.light      |
| 761,896637             | 845,447556         | sp P01579 IFNG_HUMAN.LTNYSVTDLNVQR.+2y7.light      |
| 761,896637             | 744,399878         | sp P01579 IFNG_HUMAN.LTNYSVTDLNVQR.+2y6.light      |
| 761,896637             | 516,288871         | sp P01579 IFNG_HUMAN.LTNYSVTDLNVQR.+2y4.light      |
| 607,669478             | 786,435595         | sp P01579 IFNG_HUMAN.AIHELIQVMAELSPAACK.+3y8.light |

|            |             |                                                    |
|------------|-------------|----------------------------------------------------|
| 607,669478 | 715,398481  | sp P01579 IFNG_HUMAN.AIHELIQVMAELSPAAK.+3y7.light  |
| 607,669478 | 586,355888  | sp P01579 IFNG_HUMAN.AIHELIQVMAELSPAAK.+3y6.light  |
| 607,669478 | 473,271824  | sp P01579 IFNG_HUMAN.AIHELIQVMAELSPAAK.+3y5.light  |
| 607,669478 | 386,239795  | sp P01579 IFNG_HUMAN.AIHELIQVMAELSPAAK.+3y4.light  |
| 499,224016 | 781,366135  | sp P15260 INGR1_HUMAN.SEEFAVC[CAM]R.+2y6.light     |
| 499,224016 | 652,323542  | sp P15260 INGR1_HUMAN.SEEFAVC[CAM]R.+2y5.light     |
| 499,224016 | 505,255128  | sp P15260 INGR1_HUMAN.SEEFAVC[CAM]R.+2y4.light     |
| 499,224016 | 434,218014  | sp P15260 INGR1_HUMAN.SEEFAVC[CAM]R.+2y3.light     |
| 499,224016 | 335,1496    | sp P15260 INGR1_HUMAN.SEEFAVC[CAM]R.+2y2.light     |
| 887,966728 | 1199,59428  | sp P15260 INGR1_HUMAN.YVSLITSYQPFSEK.+2y10.light   |
| 887,966728 | 1098,546602 | sp P15260 INGR1_HUMAN.YVSLITSYQPFSEK.+2y9.light    |
| 887,966728 | 1011,514573 | sp P15260 INGR1_HUMAN.YVSLITSYQPFSEK.+2y8.light    |
| 887,966728 | 848,451245  | sp P15260 INGR1_HUMAN.YVSLITSYQPFSEK.+2y7.light    |
| 887,966728 | 720,392667  | sp P15260 INGR1_HUMAN.YVSLITSYQPFSEK.+2y6.light    |
| 620,854043 | 871,499592  | sp P01375 TNFA_HUMAN.ANALLANGVELR.+2y8.light       |
| 620,854043 | 758,415528  | sp P01375 TNFA_HUMAN.ANALLANGVELR.+2y7.light       |
| 620,854043 | 687,378414  | sp P01375 TNFA_HUMAN.ANALLANGVELR.+2y6.light       |
| 620,854043 | 573,335487  | sp P01375 TNFA_HUMAN.ANALLANGVELR.+2y5.light       |
| 620,854043 | 417,245609  | sp P01375 TNFA_HUMAN.ANALLANGVELR.+2y3.light       |
| 911,977961 | 1210,694269 | sp P01583 IL1A_HUMAN.NYFTSVAHPNLFIA TK.+2y11.light |
| 911,977961 | 1111,625855 | sp P01583 IL1A_HUMAN.NYFTSVAHPNLFIA TK.+2y10.light |
| 911,977961 | 1040,588741 | sp P01583 IL1A_HUMAN.NYFTSVAHPNLFIA TK.+2y9.light  |

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|------------|-------------|--------------------------------------------------------------|
| 911,977961 | 903,529829  | sp P01583 IL1A_HUMAN.NYFTSVAHPNLFIA TK.+2y8.light            |
| 911,977961 | 773,424833  | sp P01583 IL1A_HUMAN.NYFTSVAHPNLFIA TK.+2y14+2.light         |
| 612,320656 | 1023,517944 | sp P01584 IL1B_HUMAN.SLVMSGPYELK.+2y9.light                  |
| 612,320656 | 924,44953   | sp P01584 IL1B_HUMAN.SLVMSGPYELK.+2y8.light                  |
| 612,320656 | 793,409046  | sp P01584 IL1B_HUMAN.SLVMSGPYELK.+2y7.light                  |
| 612,320656 | 706,377017  | sp P01584 IL1B_HUMAN.SLVMSGPYELK.+2y6.light                  |
| 612,320656 | 512,26261   | sp P01584 IL1B_HUMAN.SLVMSGPYELK.+2y9+2.light                |
| 528,942032 | 787,41961   | sp P01584 IL1B_HUMAN.DDKPTLQLESVDPK.+3y7.light               |
| 528,942032 | 674,335546  | sp P01584 IL1B_HUMAN.DDKPTLQLESVDPK.+3y6.light               |
| 528,942032 | 545,292953  | sp P01584 IL1B_HUMAN.DDKPTLQLESVDPK.+3y5.light               |
| 528,942032 | 458,260925  | sp P01584 IL1B_HUMAN.DDKPTLQLESVDPK.+3y4.light               |
| 528,942032 | 677,882467  | sp P01584 IL1B_HUMAN.DDKPTLQLESVDPK.+3y12+2.light            |
| 874,126544 | 1130,605179 | sp P60568 IL2_HUMAN.HLQC[CAM]LEELKPLEEVLNLAQSK.+3y10.light   |
| 874,126544 | 773,451579  | sp P60568 IL2_HUMAN.HLQC[CAM]LEELKPLEEVLNLAQSK.+3y7.light    |
| 874,126544 | 1185,61469  | sp P60568 IL2_HUMAN.HLQC[CAM]LEELKPLEEVLNLAQSK.+3y20+2.light |
| 874,126544 | 855,985452  | sp P60568 IL2_HUMAN.HLQC[CAM]LEELKPLEEVLNLAQSK.+3y15+2.light |
| 874,126544 | 791,464155  | sp P60568 IL2_HUMAN.HLQC[CAM]LEELKPLEEVLNLAQSK.+3y14+2.light |
| 663,356616 | 1012,542185 | sp P05231 IL6_HUMAN.EALAENNLNLPK.+2y9.light                  |
| 663,356616 | 941,505071  | sp P05231 IL6_HUMAN.EALAENNLNLPK.+2y8.light                  |
| 663,356616 | 812,462478  | sp P05231 IL6_HUMAN.EALAENNLNLPK.+2y7.light                  |
| 663,356616 | 471,292559  | sp P05231 IL6_HUMAN.EALAENNLNLPK.+2y4.light                  |
| 663,356616 | 563,316763  | sp P05231 IL6_HUMAN.EALAENNLNLPK.+2y10+2.light               |

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| 1107,096262 | 1197,626249 | sp P05231 IL6_HUMAN.IITGLLEFEVYLEYLQNR.+2y9.light                |
| 1107,096262 | 935,494506  | sp P05231 IL6_HUMAN.IITGLLEFEVYLEYLQNR.+2y7.light                |
| 1107,096262 | 822,410442  | sp P05231 IL6_HUMAN.IITGLLEFEVYLEYLQNR.+2y6.light                |
| 1107,096262 | 693,367849  | sp P05231 IL6_HUMAN.IITGLLEFEVYLEYLQNR.+2y5.light                |
| 1107,096262 | 530,304521  | sp P05231 IL6_HUMAN.IITGLLEFEVYLEYLQNR.+2y4.light                |
| 883,958911  | 1047,550307 | sp P10145 IL8_HUMAN.VIESGPHC[CAM]ANTEIIVK.+2y9.light             |
| 883,958911  | 834,424704  | sp P10145 IL8_HUMAN.VIESGPHC[CAM]ANTEIIVK.+2y15+2.light          |
| 883,958911  | 777,882672  | sp P10145 IL8_HUMAN.VIESGPHC[CAM]ANTEIIVK.+2y14+2.light          |
| 883,958911  | 713,361376  | sp P10145 IL8_HUMAN.VIESGPHC[CAM]ANTEIIVK.+2y13+2.light          |
| 883,958911  | 641,334629  | sp P10145 IL8_HUMAN.VIESGPHC[CAM]ANTEIIVK.+2y11+2.light          |
| 730,852861  | 827,436992  | sp Q15628 TRADD_HUMAN.C[CAM]LSC[CAM]ILAQQPDR.+2y7.light          |
| 730,852861  | 714,352928  | sp Q15628 TRADD_HUMAN.C[CAM]LSC[CAM]ILAQQPDR.+2y6.light          |
| 730,852861  | 643,315814  | sp Q15628 TRADD_HUMAN.C[CAM]LSC[CAM]ILAQQPDR.+2y5.light          |
| 730,852861  | 515,257236  | sp Q15628 TRADD_HUMAN.C[CAM]LSC[CAM]ILAQQPDR.+2y4.light          |
| 730,852861  | 387,198659  | sp Q15628 TRADD_HUMAN.C[CAM]LSC[CAM]ILAQQPDR.+2y3.light          |
| 733,885541  | 1004,552356 | sp Q15628 TRADD_HUMAN.EGLYEQAFQLLR.+2y8.light                    |
| 733,885541  | 875,509763  | sp Q15628 TRADD_HUMAN.EGLYEQAFQLLR.+2y7.light                    |
| 733,885541  | 747,451185  | sp Q15628 TRADD_HUMAN.EGLYEQAFQLLR.+2y6.light                    |
| 733,885541  | 676,414071  | sp Q15628 TRADD_HUMAN.EGLYEQAFQLLR.+2y5.light                    |
| 733,885541  | 529,345657  | sp Q15628 TRADD_HUMAN.EGLYEQAFQLLR.+2y4.light                    |
| 872,458516  | 1195,100073 | sp P14778 IL1R1_HUMAN.IILVSSANEIDVRPC[CAM]PLNPNEHK.+3y21+2.light |
| 872,458516  | 1138,558041 | sp P14778 IL1R1_HUMAN.IILVSSANEIDVRPC[CAM]PLNPNEHK.+3y20+2.light |

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| 872,458516 | 1089,023834 | sp P14778 IL1R1_HUMAN.IILVSSANEIDVRPC[CAM]PLNPNEHK.+3y19+2.light |
| 872,458516 | 730,874984  | sp P14778 IL1R1_HUMAN.IILVSSANEIDVRPC[CAM]PLNPNEHK.+3y12+2.light |
| 872,458516 | 681,340777  | sp P14778 IL1R1_HUMAN.IILVSSANEIDVRPC[CAM]PLNPNEHK.+3y11+2.light |
| 742,335358 | 859,413085  | sp P14778 IL1R1_HUMAN.VEDSGHYYC[CAM]VVR.+2y6.light               |
| 742,335358 | 696,349757  | sp P14778 IL1R1_HUMAN.VEDSGHYYC[CAM]VVR.+2y5.light               |
| 742,335358 | 628,279854  | sp P14778 IL1R1_HUMAN.VEDSGHYYC[CAM]VVR.+2y10+2.light            |
| 742,335358 | 570,766383  | sp P14778 IL1R1_HUMAN.VEDSGHYYC[CAM]VVR.+2y9+2.light             |
| 742,335358 | 498,739637  | sp P14778 IL1R1_HUMAN.VEDSGHYYC[CAM]VVR.+2y7+2.light             |
| 642,274733 | 767,368243  | sp P31785 IL2RG_HUMAN.TDWDHSWTEQSVDYR.+3y6.light                 |
| 642,274733 | 552,277637  | sp P31785 IL2RG_HUMAN.TDWDHSWTEQSVDYR.+3y4.light                 |
| 642,274733 | 453,209223  | sp P31785 IL2RG_HUMAN.TDWDHSWTEQSVDYR.+3y3.light                 |
| 642,274733 | 338,18228   | sp P31785 IL2RG_HUMAN.TDWDHSWTEQSVDYR.+3y2.light                 |
| 642,274733 | 854,87115   | sp P31785 IL2RG_HUMAN.TDWDHSWTEQSVDYR.+3y13+2.light              |
| 972,4683   | 1054,542854 | sp P08887 IL6RA_HUMAN.DLQHHC[CAM]VIHDAWSGLR.+2y9.light           |
| 972,4683   | 941,45879   | sp P08887 IL6RA_HUMAN.DLQHHC[CAM]VIHDAWSGLR.+2y8.light           |
| 972,4683   | 689,372935  | sp P08887 IL6RA_HUMAN.DLQHHC[CAM]VIHDAWSGLR.+2y6.light           |
| 972,4683   | 914,954829  | sp P08887 IL6RA_HUMAN.DLQHHC[CAM]VIHDAWSGLR.+2y15+2.light        |
| 972,4683   | 794,383508  | sp P08887 IL6RA_HUMAN.DLQHHC[CAM]VIHDAWSGLR.+2y13+2.light        |
| 891,540828 | 856,561464  | sp Q13651 I10R1_HUMAN.MLPC[CAM]LVVLLAALLSLR.+2y8.light           |
| 891,540828 | 743,4774    | sp Q13651 I10R1_HUMAN.MLPC[CAM]LVVLLAALLSLR.+2y7.light           |
| 891,540828 | 601,403172  | sp Q13651 I10R1_HUMAN.MLPC[CAM]LVVLLAALLSLR.+2y5.light           |
| 891,540828 | 488,319108  | sp Q13651 I10R1_HUMAN.MLPC[CAM]LVVLLAALLSLR.+2y4.light           |

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| 891,540828 | 584,394816  | sp Q13651 I10R1_HUMAN.MLPC[CAM]LVVLLAALLSLR.+2y11+2.light       |
| 702,369526 | 1176,604785 | sp Q08334 I10R2_HUMAN.NILQWESPAFAK.+2y10.light                  |
| 702,369526 | 1063,520721 | sp Q08334 I10R2_HUMAN.NILQWESPAFAK.+2y9.light                   |
| 702,369526 | 935,462144  | sp Q08334 I10R2_HUMAN.NILQWESPAFAK.+2y8.light                   |
| 702,369526 | 749,382831  | sp Q08334 I10R2_HUMAN.NILQWESPAFAK.+2y7.light                   |
| 702,369526 | 620,340238  | sp Q08334 I10R2_HUMAN.NILQWESPAFAK.+2y6.light                   |
| 686,837536 | 1122,524821 | sp P15692 VEGFA_HUMAN.HLFVQDPQTC[CAM]K.+2y9.light               |
| 686,837536 | 975,456407  | sp P15692 VEGFA_HUMAN.HLFVQDPQTC[CAM]K.+2y8.light               |
| 686,837536 | 876,387993  | sp P15692 VEGFA_HUMAN.HLFVQDPQTC[CAM]K.+2y7.light               |
| 686,837536 | 748,329415  | sp P15692 VEGFA_HUMAN.HLFVQDPQTC[CAM]K.+2y6.light               |
| 686,837536 | 633,302472  | sp P15692 VEGFA_HUMAN.HLFVQDPQTC[CAM]K.+2y5.light               |
| 788,35903  | 1188,553144 | sp P10147 CCL3_HUMAN.QVC[CAM]ADPSEEWVQK.+2y10.light             |
| 788,35903  | 1117,51603  | sp P10147 CCL3_HUMAN.QVC[CAM]ADPSEEWVQK.+2y9.light              |
| 788,35903  | 1002,489087 | sp P10147 CCL3_HUMAN.QVC[CAM]ADPSEEWVQK.+2y8.light              |
| 788,35903  | 560,319108  | sp P10147 CCL3_HUMAN.QVC[CAM]ADPSEEWVQK.+2y4.light              |
| 788,35903  | 674,795534  | sp P10147 CCL3_HUMAN.QVC[CAM]ADPSEEWVQK.+2y11+2.light           |
| 894,763383 | 721,424302  | sp P13236 CCL4_HUMAN.NFVVDYYETSSLC[CAM]SQPAVVFQTK.+3y6.light    |
| 894,763383 | 622,355888  | sp P13236 CCL4_HUMAN.NFVVDYYETSSLC[CAM]SQPAVVFQTK.+3y5.light    |
| 894,763383 | 523,287474  | sp P13236 CCL4_HUMAN.NFVVDYYETSSLC[CAM]SQPAVVFQTK.+3y4.light    |
| 894,763383 | 1211,085765 | sp P13236 CCL4_HUMAN.NFVVDYYETSSLC[CAM]SQPAVVFQTK.+3y21+2.light |
| 894,763383 | 1161,551558 | sp P13236 CCL4_HUMAN.NFVVDYYETSSLC[CAM]SQPAVVFQTK.+3y20+2.light |
| 824,445628 | 1219,65688  | sp P19320 VCAM1_HUMAN.SLEVTFTPVIEDIGK.+2y11.light               |

|            |             |                                                            |
|------------|-------------|------------------------------------------------------------|
| 824,445628 | 1118,609202 | sp P19320 VCAM1_HUMAN.SLEVTFTPVEDIGK.+2y10.light           |
| 824,445628 | 971,540788  | sp P19320 VCAM1_HUMAN.SLEVTFTPVEDIGK.+2y9.light            |
| 824,445628 | 870,49311   | sp P19320 VCAM1_HUMAN.SLEVTFTPVEDIGK.+2y8.light            |
| 824,445628 | 659,866285  | sp P19320 VCAM1_HUMAN.SLEVTFTPVEDIGK.+2y12+2.light         |
| 756,414242 | 626,362036  | sp P19320 VCAM1_HUMAN.EVELIVQEKPFTEISPGPR.+3y6.light       |
| 756,414242 | 513,277972  | sp P19320 VCAM1_HUMAN.EVELIVQEKPFTEISPGPR.+3y5.light       |
| 756,414242 | 426,245943  | sp P19320 VCAM1_HUMAN.EVELIVQEKPFTEISPGPR.+3y4.light       |
| 756,414242 | 842,456861  | sp P19320 VCAM1_HUMAN.EVELIVQEKPFTEISPGPR.+3y15+2.light    |
| 756,414242 | 600,324588  | sp P19320 VCAM1_HUMAN.EVELIVQEKPFTEISPGPR.+3y11+2.light    |
| 706,864077 | 1051,520721 | sp P05362 ICAM1_HUMAN.TFLTYYWTPER.+2y8.light               |
| 706,864077 | 851,404629  | sp P05362 ICAM1_HUMAN.TFLTYYWTPER.+2y6.light               |
| 706,864077 | 688,3413    | sp P05362 ICAM1_HUMAN.TFLTYYWTPER.+2y5.light               |
| 706,864077 | 502,261987  | sp P05362 ICAM1_HUMAN.TFLTYYWTPER.+2y4.light               |
| 706,864077 | 401,214309  | sp P05362 ICAM1_HUMAN.TFLTYYWTPER.+2y3.light               |
| 924,469643 | 1208,699748 | sp P05362 ICAM1_HUMAN.SFSC[CAM]SATLEVAGQLIHK.+2y11.light   |
| 924,469643 | 994,568006  | sp P05362 ICAM1_HUMAN.SFSC[CAM]SATLEVAGQLIHK.+2y9.light    |
| 924,469643 | 865,525413  | sp P05362 ICAM1_HUMAN.SFSC[CAM]SATLEVAGQLIHK.+2y8.light    |
| 924,469643 | 766,456999  | sp P05362 ICAM1_HUMAN.SFSC[CAM]SATLEVAGQLIHK.+2y7.light    |
| 924,469643 | 695,419885  | sp P05362 ICAM1_HUMAN.SFSC[CAM]SATLEVAGQLIHK.+2y6.light    |
| 763,052428 | 1014,507714 | sp P04085 PDGFA_HUMAN.SQVDPTSANFLIWPPC[CAM]VEVK.+3y8.light |
| 763,052428 | 828,428401  | sp P04085 PDGFA_HUMAN.SQVDPTSANFLIWPPC[CAM]VEVK.+3y7.light |
| 763,052428 | 731,375637  | sp P04085 PDGFA_HUMAN.SQVDPTSANFLIWPPC[CAM]VEVK.+3y6.light |

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| 763,052428 | 507,757495  | sp P04085 PDGFA_HUMAN.SQVDPTSANFLIWPPC[CAM]VEVK.+3y8+2.light |
| 763,052428 | 414,717839  | sp P04085 PDGFA_HUMAN.SQVDPTSANFLIWPPC[CAM]VEVK.+3y7+2.light |
| 625,321522 | 1002,573091 | sp P13501 CCL5_HUMAN.C[CAM]SNPAVVFVTR.+2y9.light             |
| 625,321522 | 888,530164  | sp P13501 CCL5_HUMAN.C[CAM]SNPAVVFVTR.+2y8.light             |
| 625,321522 | 720,440286  | sp P13501 CCL5_HUMAN.C[CAM]SNPAVVFVTR.+2y6.light             |
| 625,321522 | 522,303458  | sp P13501 CCL5_HUMAN.C[CAM]SNPAVVFVTR.+2y4.light             |
| 625,321522 | 375,235044  | sp P13501 CCL5_HUMAN.C[CAM]SNPAVVFVTR.+2y3.light             |
| 825,907733 | 1207,606576 | sp P01137 TGFB1_HUMAN.DNTLQVDINGFTTGR.+2y11.light            |
| 825,907733 | 1079,547999 | sp P01137 TGFB1_HUMAN.DNTLQVDINGFTTGR.+2y10.light            |
| 825,907733 | 980,479585  | sp P01137 TGFB1_HUMAN.DNTLQVDINGFTTGR.+2y9.light             |
| 825,907733 | 752,368578  | sp P01137 TGFB1_HUMAN.DNTLQVDINGFTTGR.+2y7.light             |
| 825,907733 | 434,235772  | sp P01137 TGFB1_HUMAN.DNTLQVDINGFTTGR.+2y4.light             |
| 594,823897 | 960,529512  | sp P01137 TGFB1_HUMAN.VEQLSNMIVR.+2y8.light                  |
| 594,823897 | 832,470934  | sp P01137 TGFB1_HUMAN.VEQLSNMIVR.+2y7.light                  |
| 594,823897 | 719,38687   | sp P01137 TGFB1_HUMAN.VEQLSNMIVR.+2y6.light                  |
| 594,823897 | 632,354842  | sp P01137 TGFB1_HUMAN.VEQLSNMIVR.+2y5.light                  |
| 594,823897 | 480,768394  | sp P01137 TGFB1_HUMAN.VEQLSNMIVR.+2y8+2.light                |
| 637,294016 | 1031,454098 | sp P09038 FGF2_HUMAN.LESNNTYNTYR.+2y8.light                  |
| 637,294016 | 830,379142  | sp P09038 FGF2_HUMAN.LESNNTYNTYR.+2y6.light                  |
| 637,294016 | 716,336215  | sp P09038 FGF2_HUMAN.LESNNTYNTYR.+2y5.light                  |
| 637,294016 | 553,272886  | sp P09038 FGF2_HUMAN.LESNNTYNTYR.+2y4.light                  |
| 637,294016 | 439,229959  | sp P09038 FGF2_HUMAN.LESNNTYNTYR.+2y3.light                  |

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|------------|-------------|-----------------------------------------------------------------|
| 545,820095 | 906,511736  | sp P09038 FGF2_HUMAN.AILFLPMSAK.+2y8.light                      |
| 545,820095 | 793,427672  | sp P09038 FGF2_HUMAN.AILFLPMSAK.+2y7.light                      |
| 545,820095 | 646,359259  | sp P09038 FGF2_HUMAN.AILFLPMSAK.+2y6.light                      |
| 545,820095 | 510,301538  | sp P09038 FGF2_HUMAN.AILFLPMSAK.+2y9+2.light                    |
| 545,820095 | 453,759506  | sp P09038 FGF2_HUMAN.AILFLPMSAK.+2y8+2.light                    |
| 772,341991 | 1216,497286 | sp P35968 VGFR2_HUMAN.VEVTEC[CAM]SDGLFC[CAM]K.+2y10.light       |
| 772,341991 | 1115,449607 | sp P35968 VGFR2_HUMAN.VEVTEC[CAM]SDGLFC[CAM]K.+2y9.light        |
| 772,341991 | 986,407014  | sp P35968 VGFR2_HUMAN.VEVTEC[CAM]SDGLFC[CAM]K.+2y8.light        |
| 772,341991 | 454,211866  | sp P35968 VGFR2_HUMAN.VEVTEC[CAM]SDGLFC[CAM]K.+2y3.light        |
| 772,341991 | 658,286488  | sp P35968 VGFR2_HUMAN.VEVTEC[CAM]SDGLFC[CAM]K.+2y11+2.light     |
| 740,887749 | 1034,551687 | sp P35968 VGFR2_HUMAN.VEAFIIIEGAQEK.+2y9.light                  |
| 740,887749 | 887,483273  | sp P35968 VGFR2_HUMAN.VEAFIIIEGAQEK.+2y8.light                  |
| 740,887749 | 774,399209  | sp P35968 VGFR2_HUMAN.VEAFIIIEGAQEK.+2y7.light                  |
| 740,887749 | 661,315145  | sp P35968 VGFR2_HUMAN.VEAFIIIEGAQEK.+2y6.light                  |
| 740,887749 | 532,272552  | sp P35968 VGFR2_HUMAN.VEAFIIIEGAQEK.+2y5.light                  |
| 749,896637 | 1213,653526 | sp P17948 VGFR1_HUMAN.LGDLLQANVQQDGK.+2y11.light                |
| 749,896637 | 1100,569462 | sp P17948 VGFR1_HUMAN.LGDLLQANVQQDGK.+2y10.light                |
| 749,896637 | 987,485398  | sp P17948 VGFR1_HUMAN.LGDLLQANVQQDGK.+2y9.light                 |
| 749,896637 | 859,426821  | sp P17948 VGFR1_HUMAN.LGDLLQANVQQDGK.+2y8.light                 |
| 749,896637 | 788,389707  | sp P17948 VGFR1_HUMAN.LGDLLQANVQQDGK.+2y7.light                 |
| 835,164666 | 694,413403  | sp P32246 CCR1_HUMAN.LNLFGLVLP LLVMIIC[CAM]YTGIIK.+3y6.light    |
| 835,164666 | 817,474623  | sp P32246 CCR1_HUMAN.LNLFGLVLP LLVMIIC[CAM]YTGIIK.+3y14+2.light |

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| 835,164666  | 768,948241  | sp P32246 CCR1_HUMAN.LNLFGLVLP LLVM IIC[CAM]YTGIHK.+3y13+2.light |
| 835,164666  | 712,406209  | sp P32246 CCR1_HUMAN.LNLFGLVLP LLVM IIC[CAM]YTGIHK.+3y12+2.light |
| 835,164666  | 655,864177  | sp P32246 CCR1_HUMAN.LNLFGLVLP LLVM IIC[CAM]YTGIHK.+3y11+2.light |
| 858,435595  | 1205,604845 | sp P37173 TGFR2_HUMAN.LPYHDFILED AASPK.+2y11.light               |
| 858,435595  | 1090,577902 | sp P37173 TGFR2_HUMAN.LPYHDFILED AASPK.+2y10.light               |
| 858,435595  | 830,425424  | sp P37173 TGFR2_HUMAN.LPYHDFILED AASPK.+2y8.light                |
| 858,435595  | 801,893563  | sp P37173 TGFR2_HUMAN.LPYHDFILED AASPK.+2y14+2.light             |
| 858,435595  | 671,835516  | sp P37173 TGFR2_HUMAN.LPYHDFILED AASPK.+2y12+2.light             |
| 922,410414  | 967,466577  | sp P37173 TGFR2_HUMAN.NDLTC[CAM]C[CAM]LC[CAM]DFGLSLR.+2y8.light  |
| 922,410414  | 807,435929  | sp P37173 TGFR2_HUMAN.NDLTC[CAM]C[CAM]LC[CAM]DFGLSLR.+2y7.light  |
| 922,410414  | 692,408986  | sp P37173 TGFR2_HUMAN.NDLTC[CAM]C[CAM]LC[CAM]DFGLSLR.+2y6.light  |
| 922,410414  | 545,340572  | sp P37173 TGFR2_HUMAN.NDLTC[CAM]C[CAM]LC[CAM]DFGLSLR.+2y5.light  |
| 922,410414  | 375,235044  | sp P37173 TGFR2_HUMAN.NDLTC[CAM]C[CAM]LC[CAM]DFGLSLR.+2y3.light  |
| 1015,013457 | 960,485733  | sp P37173 TGFR2_HUMAN.LDPTLSVDDLANS GQVG TAR.+2y10.light         |
| 1015,013457 | 889,448619  | sp P37173 TGFR2_HUMAN.LDPTLSVDDLANS GQVG TAR.+2y9.light          |
| 1015,013457 | 775,405691  | sp P37173 TGFR2_HUMAN.LDPTLSVDDLANS GQVG TAR.+2y8.light          |
| 1015,013457 | 688,373663  | sp P37173 TGFR2_HUMAN.LDPTLSVDDLANS GQVG TAR.+2y7.light          |
| 1015,013457 | 900,957954  | sp P37173 TGFR2_HUMAN.LDPTLSVDDLANS GQVG TAR.+2y18+2.light       |
| 721,37534   | 1175,641899 | sp P36897 TGFR1_HUMAN.HENILGFIAADNK.+2y11.light                  |
| 721,37534   | 948,514908  | sp P36897 TGFR1_HUMAN.HENILGFIAADNK.+2y9.light                   |
| 721,37534   | 835,430844  | sp P36897 TGFR1_HUMAN.HENILGFIAADNK.+2y8.light                   |
| 721,37534   | 631,340966  | sp P36897 TGFR1_HUMAN.HENILGFIAADNK.+2y6.light                   |

|            |            |                                                           |
|------------|------------|-----------------------------------------------------------|
| 721,37534  | 518,256902 | sp P36897 TGFR1_HUMAN.HENILGFIAADNK.+2y5.light            |
| 760,371417 | 814,478128 | sp P36897 TGFR1_HUMAN.NGTC[CAM]C[CAM]IADLGLAVR.+2y8.light |
| 760,371417 | 743,441014 | sp P36897 TGFR1_HUMAN.NGTC[CAM]C[CAM]IADLGLAVR.+2y7.light |
| 760,371417 | 628,414071 | sp P36897 TGFR1_HUMAN.NGTC[CAM]C[CAM]IADLGLAVR.+2y6.light |
| 760,371417 | 515,330007 | sp P36897 TGFR1_HUMAN.NGTC[CAM]C[CAM]IADLGLAVR.+2y5.light |

**Table S5.** Protein classification based on their biological functions.

| Transferases<br>(11%) | Defense/ Immunity<br>(21%) | Receptors<br>(26%) | Signaling<br>Molecules<br>(42%) |
|-----------------------|----------------------------|--------------------|---------------------------------|
| TGFR1_HUMAN           | IL6R_HUMAN                 | TGFR1_HUMAN        | IL6RA_HUMAN                     |
| TGFR2_HUMAN           | IL2RG_HUMAN                | IL10R1_HUMAN       | TNFA_HUMAN                      |
|                       | IL10R1_HUMAN               | IL10R2_HUMAN       | FGF2_HUMAN                      |
|                       | IL10R2_HUMAN               | IL1R1_HUMAN        | PDGFA_HUMAN                     |
|                       |                            | TGFR2_HUMAN        | IL2RG_HUMAN                     |
|                       |                            |                    | IL8_HUMAN                       |
|                       |                            |                    | TGFB1_HUMAN                     |
|                       |                            |                    | VEGFA_HUMAN                     |

**Table S6.** Validation test for CBU<sub>s</sub> and APB samples.

| <b>Tests</b>                | <b>Peripheral Blood Units</b> | <b>Cord Blood Units</b> | <b>Acceptable Values</b> |
|-----------------------------|-------------------------------|-------------------------|--------------------------|
| <b>Anti-HIV I/II</b>        | Negative                      | Negative                | <1.0 S/CO                |
| <b>Anti-HBs</b>             | Negative                      | Negative                | <10 mIU/ml               |
| <b>HBsAg</b>                | Negative                      | Negative                | <1.0 S/CO                |
| <b>Anti-HBcore</b>          | Negative                      | Negative                | <1.0 S/CO                |
| <b>Anti-HGV</b>             | Negative                      | Negative                | <1.0 S/CO                |
| <b>Anti-HTLV I/II</b>       | Negative                      | Negative                | <1.0 S/CO                |
| <b>Anti-CMV-IgG</b>         | Negative                      | Negative                | <1.0 AU/ml               |
| <b>Anti-HCV</b>             | Negative                      | Negative                | <1.0 S/CO                |
| <b>Anti-HAV</b>             | Negative                      | Negative                | <1.0 S/CO                |
| <b>Anti-WNV-IgG</b>         | Negative                      | Negative                | <1.3 S/CO                |
| <b>Anti-WNV-IgM</b>         | Negative                      | Negative                | <0.9 AU/ml               |
| <b>Anti-T.Pallidum</b>      | Negative                      | Negative                | <1.0 AU/ml               |
| <b>Anti-T.cruzi</b>         | Negative                      | Negative                | <1.0 AU/ml               |
| <b>BacT/Alert aerobic</b>   | Negative                      | Negative                | -                        |
| <b>BacT/Alert anaerobic</b> | Negative                      | Negative                | -                        |
| <b>Blood Agar</b>           | No Growth                     | No Growth               | <4-5 colonies            |
| <b>Sabouraud Agar</b>       | No Growth                     | No Growth               | <1-3 colonies            |

**Table S7.** Validation test for PRP derived from CBUs and APB samples.

| <b>Tests</b>                | <b>Peripheral Blood Units</b> | <b>Cord Blood Units</b> | <b>Acceptable Values</b>     |
|-----------------------------|-------------------------------|-------------------------|------------------------------|
| <b>Anti-HIV I/II</b>        | Negative                      | Negative                | <1.0 S/CO                    |
| <b>Anti-HBs</b>             | Negative                      | Negative                | <10 mIU/ml                   |
| <b>HBsAg</b>                | Negative                      | Negative                | <1.0 S/CO                    |
| <b>Anti-HBcore</b>          | Negative                      | Negative                | <1.0 S/CO                    |
| <b>Anti-HGV</b>             | Negative                      | Negative                | <1.0 S/CO                    |
| <b>Anti-HTLV I/II</b>       | Negative                      | Negative                | <1.0 S/CO                    |
| <b>Anti-CMV-IgG</b>         | Negative                      | Negative                | <1.0 AU/ml                   |
| <b>Anti-HCV</b>             | Negative                      | Negative                | <1.0 S/CO                    |
| <b>Anti-HAV</b>             | Negative                      | Negative                | <1.0 S/CO                    |
| <b>Anti-WNV-IgG</b>         | Negative                      | Negative                | <1.3 S/CO                    |
| <b>Anti-WNV-IgM</b>         | Negative                      | Negative                | <0.9 AU/ml                   |
| <b>Anti-T.Pallidum</b>      | Negative                      | Negative                | <1.0 AU/ml                   |
| <b>Anti-T.cruzi</b>         | Negative                      | Negative                | <1.0 AU/ml                   |
| <b>BacT/Alert aerobic</b>   | Negative                      | Negative                | -                            |
| <b>BacT/Alert anaerobic</b> | Negative                      | Negative                | -                            |
| <b>Blood Agar</b>           | No Growth                     | No Growth               | <4-5 colonies                |
| <b>Sabouraud Agar</b>       | No Growth                     | No Growth               | <1-3 colonies                |
| <b>Endotoxin level</b>      | Negative                      | Negative                | <2.5 EU/ml                   |
| <b>Mycoplasma Test</b>      | Negative                      | Negative                | <0.72 MycoAlert Ratio (RLUs) |

