**Table 3.** Upregulated proteins in comparisons of the CCDS group with both the adult and the ageing

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Accession numbera** | **Protein name** | **Protein mass** | **pI** | **Protein score** | **Biological process** |
| gi|73955106 | apolipoprotein A-I | 30163 | 5.28 | 2244 | lipoprotein metabolic process |
| gi|704000372 | apolipoprotein A-IV | 42510 | 5.75 | 318 | removal of superoxide radicals |
| gi|345799905 | predict apolipoprotein A-IV | 43795 | 5.34 | 615 | removal of superoxide radicals |
| gi|545488191 | apolipoprotein E isoform X5 | 47029 | 8.45 | 88 | regulation of amyloid beta clearance |
| gi|73978329 | fibrinogen alpha chain | 96583 | 5.76 | 275 | blood coagulation |
| gi|73977992 | fibrinogen gamma chain isoformX1 | 49286 | 5.74 | 1092 | blood coagulation |
| gi|120141 | fibrinogen gamma chain, partial | 2688 | 4.55 | 93 | blood coagulation |
| gi|57109938 | kininogen-1 | 48317 | 5.58 | 104 | blood coagulation |
| gi|545485785 | plasminogen isoformX1 | 90952 | 6.75 | 121 | blood coagulation |
| gi|130314 | plasminogen | 36654 | 8.48 | 152 | blood coagulation |
| gi|123511 | haptoglobin | 36434 | 5.72 | 2272 | acute phase response |
| gi|545560457 | inter-alpha-trypsin inhibitor heavy chain H4 isoformX1 | 113355 | 7.1 | 292 | acute phase response |
| gi|359321961 | prothrombin | 70259 | 5.71 | 42 | acute phase response and blood coagulation |

a Accession number from NCBInr database for *Canis* spp.

**Table 3.** Upregulated proteins in comparisons of the CCDS group with both the adult and the ageing (cont.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Accession numbera** | **Protein** **name** | **Protein mass** | **pI** | **Protein score** | **Biological process** |
| gi|345803075 | C4b-binding protein alpha chain isoform X1 | 68505 | 7.77 | 171 | complement activation classical pathway |
| gi|50979240 | clusterin precursor | 51757 | 5.65 | 107 | complement activation and regulation of Aβ formation |
| gi|598107 | IgA heavy chain constant region | 37255 | 6.06 | 114 | complement activation classical pathway |
| gi|19715661 | Ig J chain | 12733 | 4.94 | 38 | innate immune response |
| gi|73995687 | Ig lambda-like polypeptide 5-like | 14832 | 8.84 | 1528 | complement activation classical pathway |
| gi|345777714 | alpha-1-acid glycoprotein 1 isoform X1 | 23291 | 5.38 | 45 | regulation of immune response |
| gi|545531456 | plasma protease C1 inhibitor | 48128 | 5.51 | 88 | complement activation classical pathway |
| gi|50978658 | alpha-fetoprotein precursor | 68738 | 5.77 | 52 | [cellular protein metabolic process](https://www.ebi.ac.uk/QuickGO/term/GO:0044267) |
| gi|256574824 | glutathione peroxidase 3 precursor | 25363 | 8.79 | 59 | response to oxidative stress |
| gi|44888810 | hemoglobin alpha chain | 15208 | 7.98 | 267 | cellular oxidant detoxification |
| gi|73988725 | hemopexin | 51305 | 6.88 | 149 | heme metabolic process |
| gi|119637837 | pigment epithelium-derived factor | 44236 | 8.69 | 40 | aging |
| gi|57089193 | transthyretin isoform 2 | 15858 | 6.42 | 619 | retinol, thyroid hormone transport |

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