|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 2. Proteins associated with increased SCD risk | | | | | Crude model | | Full model | |
| Protein | **Gene** | **Molecular function1** | **Predicted location2** | **Enhanced tissue expression3** | **OR [95 % CI]** | **P-value** | **OR [95 % CI]** | **P-value** |
| Hepatocyte growth factor | **HGF** (DFNB39, F-TCF, HGFB, HPTA, SF) | Growth factor, Serine protease homolog | Secreted | *RNA:* Placenta  *Protein:* Tibial and coronary arteries | 2.27 [1.73 - 2.98] | **4,06E-09** | 1.81 [1.34 - 2.44] | **9,99E-05** |
| Leukotriene A4 hydrolase | **LTA4H** | Hydrolase, Metalloprotease, Protease | Intracellular | *RNA:* Low tissue specificity  Protein: Lung | 1.67 [1.32 - 2.11] | **2,31E-05** | 1.8 [1.31 - 2.46] | **2,69E-04** |
| Hepatitis A virus cellular receptor 1 (Kidney injury molecule 1) | **HAVCR1** (CD365, HAVCR, HAVCR-1, KIM1, TIM-1, TIM1, TIMD1) | Host cell receptor for virus entry, Receptor | Intracellular, Membrane | RNA: Kidney | 2.11 [1.65 - 2.71] | **4,40E-09** | 1.65 [1.24 - 2.2] | *5,16E-04* |
| TNF receptor superfamily member 11b (Osteoprotegerin) | **TNFRSF11B**  (OCIF, OPG, TR1) | Receptor | Secreted | *RNA:* Thyroid,  Kidney  *Protein:* Aorta, tibial and coronary arteries | 1.76 [1.4 - 2.21] | **1,20E-06** | 1.47 [1.13 - 1.92] | *3,94E-03* |
| Fibroblast growth factor 23 | **FGF23** | Growth factor | Secreted | *RNA:* Blood, heart muscle, liver, urinary bladder | 1.69 [1.31 - 2.17] | **4,61E-05** | 1.47 [1.13 - 1.91] | *4,10E-03* |
| Oncostatin M | **OSM** (MGC20461) | Cytokine, Mitogen | Intracellular, Secreted | *RNA:* Blood, bone marrow | 1.57 [1.28 - 1.93] | **1,94E-05** | 1.37 [1.08 - 1.73] | *9,83E-03* |
| CUB domain containing protein 1 | **CDCP1** (CD318, SIMA135) |  | Intracellular, Membrane | *RNA:* Low tissue specificity | 1.56 [1.25 - 1.94] | **6,32E-05** | 1.37 [1.07 - 1.76] | *1,31E-02* |
| Platelet derived growth factor C | **PDGFC** (fallotein, SCDGF) | Developmental protein, Growth factor, Mitogen | Secreted | *RNA:* Low tissue specificity  Protein: Tibial artery and aorta | 1.66 [1.3 - 2.12] | **5,62E-05** | 1.42 [1.08 - 1.88] | *1,32E-02* |
| Interleukin 18 | **IL18** (IGIF, IL-18, IL-1g, IL1F4) | Cytokine | Intracellular, Secreted | *RNA:* Skin, esophagus  Protein: Skin, esophagus | 1.57 [1.25 - 1.96] | **8,84E-05** | 1.36 [1.06 - 1.74] | *1,48E-02* |
| Vascular endothelial growth factor A | **VEGFA** (VEGF, VEGF-A, VPF) | Developmental protein, Growth factor, Heparin-binding, Mitogen | Intracellular, Secreted | *RNA:* Low tissue specificity | 1.66 [1.33 - 2.09] | **1,05E-05** | 1.34 [1.06 - 1.7] | *1,57E-02* |
| Calcitonin related polypeptide alpha | **CALCA** (CALC1) | Hormone | Secreted | *RNA:* Thyroid,  parathyroid | 1.59 [1.24 - 2.03] | **2,38E-04** | 1.32 [1 - 1.75] | *5,17E-02* |
| Interleukin 6 | **IL6** (BSF2, HGF, HSF, IFNB2, IL-6) | Cytokine, Growth factor | Intracellular, secreted | *RNA:* Adipose,  Lymphoid tissue | 1.54 [1.23 - 1.92] | **1,57E-04** | 1.24 [0.99 - 1.55] | *5,96E-02* |
| TNF superfamily member 14 | **TNFSF14** (CD258, HVEM-L, LIGHT, LTg) | Cytokine | Intracellular, Membrane, Secreted | *RNA:* Blood, Liver | 1.5 [1.22 - 1.86] | **1,53E-04** | 1.24 [0.99 - 1.56] | *6,22E-02* |
| Interleukin 18 receptor 1 | **IL18R1** (CD218a, IL-1Rrp, IL1RRP) | Hydrolase, Receptor | Intracellular, Membrane | *RNA:* Lung | 1.54 [1.26 - 1.88] | **3,05E-05** | 1.21 [0.94 - 1.54] | *1,34E-01* |

**(1). Uniprot molecular function annotation retrieved via Human Protein Atlas (HPA, version 20.0) [ref]. (2) Predicted cellular locations from Uniprot retrieved via HPA. (3). RNA tissue enhancment data were retrieved from HPA. Protein expression data were retrieved from Snyder et al 2020 [ref.].**