**Supplemental Table 2**: All Differentially Expressed Proteins (DEPs)

**Supplemental Table 2A.** Left Parotid DEPs

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene Namea** | **Up/Down- Regulatedb** | **Fold Changec** | **p-valued** |
| *IGKV1D-13* | Up | 185.66 | 2.89x10-8 |
| *MUC7* | Up | 132.36 | 3.18x10-8 |
| *SERPINB1* | Up | 81.74 | 2.89x10-8 |
| *SFN* | Up | 63.37 | 2.89x10-8 |
| *PRSS27* | Up | 55.14 | 2.89x10-8 |
| *PLS3* | Up | 45.31 | 2.94x10-8 |
| *COL6A1* | Up | 44.74 | 2.89x10-8 |
| *LGALS7B* | Up | 39.30 | 2.95x10-8 |
| *ARF3* | Up | 37.69 | 2.89x10-8 |
| *SPINK5* | Up | 36.08 | 2.89x10-8 |
| *DSG3* | Up | 35.90 | 2.89x10-8 |
| *ANXA3* | Up | 33.05 | 2.89x10-8 |
| *SYNCRIP* | Up | 31.70 | 3.18x10-8 |
| *A2M* | Up | 29.03 | 2.94x10-8 |
| *HEBP2* | Up | 28.73 | 2.89x10-8 |
| *UBE2V1* | Up | 28.67 | 2.89x10-8 |
| *GOT1* | Up | 27.33 | 3.15x10-8 |
| *GLOD4* | Up | 26.63 | 3.08x10-8 |
| *CALML5* | Up | 25.02 | 2.89x10-8 |
| *NPEPPS* | Up | 24.78 | 2.89x10-8 |
| *RAB7A* | Up | 22.11 | 2.95x10-8 |
| *CDH1* | Up | 20.72 | 2.89x10-8 |
| *SH3BGRL* | Up | 20.46 | 2.95x10-8 |
| *RPL7* | Up | 20.39 | 2.89x10-8 |
| *CBR1* | Up | 20.20 | 2.89x10-8 |
| *GNG3* | Up | 19.78 | 2.89x10-8 |
| *SBSN* | Up | 19.54 | 2.95x10-8 |
| *CAPN1* | Up | 18.80 | 2.94x10-8 |
| *TMED10* | Up | 18.15 | 2.89x10-8 |
| *TYMP* | Up | 17.45 | 2.89x10-8 |
| *IVL* | Up | 16.79 | 2.89x10-8 |
| *GGCT* | Up | 16.48 | 2.89x10-8 |
| *HPRT1* | Up | 16.27 | 2.89x10-8 |
| *GAA* | Up | 15.41 | 2.89x10-8 |
| *EEF1G* | Up | 14.41 | 2.89x10-8 |
| *CANX* | Up | 13.68 | 3.15x10-8 |
| *ANP32E* | Up | 13.67 | 2.89x10-8 |
| *BANF1* | Up | 13.26 | 2.89x10-8 |
| *SERBP1* | Up | 12.74 | 2.89x10-8 |
| *PRKCSH* | Up | 12.42 | 2.94x10-8 |
| *CCT6A* | Up | 11.63 | 2.89x10-8 |
| *PNP* | Up | 11.36 | 2.89x10-8 |
| *VCP* | Up | 10.49 | 2.89x10-8 |
| *PDCD6IP* | Up | 10.45 | 2.89x10-8 |
| *PPA1* | Up | 10.19 | 2.95x10-8 |
| *CCT5* | Up | 9.01 | 2.94x10-8 |
| *CCT7* | Up | 8.30 | 2.89x10-8 |
| *ARPC2* | Down | 8.12 | 2.48x10-9 |
| *RPS2* | Down | 8.18 | 2.48x10-9 |
| *ECH1* | Down | 10.23 | 2.48x10-9 |
| *LGMN* | Down | 11.71 | 2.48x10-9 |
| *MARCHF8* | Down | 13.14 | 2.48x10-9 |
| *HNRNPH3* | Down | 14.12 | 2.48x10-9 |
| *PSMA6* | Down | 14.64 | 2.48x10-9 |
| *IL6ST* | Down | 14.94 | 2.48x10-9 |
| *CPD* | Down | 15.05 | 2.48x10-9 |
| *CTSH* | Down | 15.18 | 2.48x10-9 |
| *SLC1A5* | Down | 15.87 | 2.48x10-9 |
| *IGF2* | Down | 17.12 | 2.48x10-9 |
| *MUC1* | Down | 18.10 | 2.48x10-9 |
| *PLEC* | Down | 19.68 | 2.48x10-9 |
| *SPATA20* | Down | 20.50 | 2.48x10-9 |
| *ENPP4* | Down | 21.58 | 2.48x10-9 |
| *HNRNPD* | Down | 21.70 | 2.48x10-9 |
| *QSOX1* | Down | 21.96 | 2.48x10-9 |
| *SLC38A10* | Down | 24.19 | 2.48x10-9 |
| *PAM* | Down | 26.29 | 2.48x10-9 |
| *CTNNA3* | Down | 30.33 | 2.48x10-9 |
| *ERP29* | Down | 31.84 | 2.48x10-9 |
| *MELTF* | Down | 33.58 | 2.48x10-9 |
| *IGLV2-18* | Down | 33.62 | 2.48x10-9 |
| *CARD9* | Down | 33.84 | 2.48x10-9 |
| *EGF* | Down | 36.20 | 2.48x10-9 |
| *PROM1* | Down | 36.31 | 2.48x10-9 |
| *IGLV5-45* | Down | 37.59 | 2.48x10-9 |
| *CREG1* | Down | 40.46 | 2.48x10-9 |
| *CFH* | Down | 44.44 | 2.48x10-9 |
| *FXYD2* | Down | 60.16 | 2.48x10-9 |
| *MMP7* | Down | 62.74 | 2.48x10-9 |
| *FURIN* | Down | 64.66 | 2.48x10-9 |
| *CUTA* | Down | 65.23 | 2.48x10-9 |
| *FOLR1* | Down | 66.07 | 2.48x10-9 |
| *GSTA1* | Down | 76.92 | 2.48x10-9 |
| *ZNF208* | Down | 95.91 | 2.48x10-9 |
| *SIL1* | Down | 113.03 | 2.48x10-9 |
| *IGHV5-10-1* | Down | 146.92 | 2.48x10-9 |

**Supplemental Table 2B**. Right Parotid DEPs

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene Namea** | **Up/Down- Regulatedb** | **Fold Changec** | **p-valued** |
| *TIMP1* | Up | 467.27 | 2.47x10-8 |
| *UGT3A1* | Up | 118.72 | 2.61x10-8 |
| *C1R* | Up | 114.75 | 2.47x10-8 |
| *IGLV7-46* | Up | 84.43 | 2.47x10-8 |
| *ZNF208* | Up | 56.35 | 2.51x10-8 |
| *GNG3* | Up | 50.71 | 2.47x10-8 |
| *ABHD14B* | Up | 42.80 | 2.47x10-8 |
| *IGLV5-45* | Up | 39.23 | 2.47x10-8 |
| *IGLV3-1* | Up | 36.58 | 2.47x10⁻⁸ |
| *PAM* | Up | 33.26 | 2.51x10-8 |
| *SPARCL1* | Up | 31.81 | 2.51x10-8 |
| *ANPEP* | Up | 28.98 | 2.47x10-8 |
| *RAB10* | Up | 28.53 | 2.47x10-8 |
| *IDUA* | Up | 25.31 | 2.47x10-8 |
| *WDR1* | Up | 25.07 | 2.71x10-8 |
| *CAP1* | Up | 24.65 | 2.71x10-8 |
| *CFB* | Up | 24.55 | 2.47x10-8 |
| *TUBA4A* | Up | 23.67 | 2.47x10-8 |
| *GSN* | Up | 20.14 | 2.47x10-8 |
| *RPLP1* | Up | 20.03 | 2.51x10-8 |
| *RPL31* | Up | 17.49 | 2.47x10-8 |
| *HEXA* | Up | 16.30 | 2.47x10-8 |
| *HLA-A* | Up | 15.70 | 2.47x10-8 |
| *IMUP* | Up | 15.17 | 2.47x10-8 |
| *LMAN2* | Up | 15.06 | 2.47x10-8 |
| *NEU1* | Up | 13.93 | 2.47x10-8 |
| *RCN1* | Up | 13.56 | 2.61x10-8 |
| *RAP1B* | Up | 13.36 | 2.51x10-8 |
| *BPIFA1* | Up | 12.78 | 2.47x10-8 |
| *RPLP0* | Up | 12.11 | 2.47x10-8 |
| *COL6A2* | Up | 11.92 | 2.47x10-8 |
| *VCP* | Up | 10.75 | 2.47x10-8 |
| *ACTR3* | Up | 9.14 | 2.47x10-8 |
| *UBE2N* | Up | 8.98 | 2.61x10-8 |
| *CCT3* | Up | 8.83 | 2.51x10-8 |
| *FASN* | Up | 8.19 | 2.47x10-8 |
| *VDAC2* | Up | 8.04 | 2.47x10-8 |
| *UBE4B* | Up | 7.64 | 2.51x10-8 |
| *CEACAM5* | Up | 7.05 | 2.47x10-8 |
| *LGALS1* | Up | 6.23 | 2.47x10-8 |
| *PSMB5* | Down | 5.46 | 1.66x10-9 |
| *LYPD3* | Down | 6.82 | 1.66x10-9 |
| *PRNP* | Down | 8.92 | 1.66x10-9 |
| *VCL* | Down | 9.09 | 1.66x10-9 |
| *PTBP1* | Down | 10.04 | 1.66x10-9 |
| *PGM2* | Down | 10.89 | 1.66x10-9 |
| *RPSA* | Down | 10.96 | 1.66x10-9 |
| *UQCRC1* | Down | 11.27 | 1.66x10-9 |
| *PSMA7* | Down | 11.79 | 1.66x10-9 |
| *VAT1* | Down | 12.01 | 1.66x10-9 |
| *PNP* | Down | 12.21 | 1.66x10-9 |
| *EIF3E* | Down | 12.65 | 1.66x10-9 |
| *SERPINA12* | Down | 12.74 | 1.66x10-9 |
| *PSMB1* | Down | 12.80 | 1.66x10-9 |
| *PHB1* | Down | 12.85 | 1.66x10-9 |
| *SERPINB13* | Down | 13.00 | 1.66x10-9 |
| *NIBAN2* | Down | 13.62 | 1.66x10-9 |
| *ENDOU* | Down | 13.66 | 1.66x10-9 |
| *RPS25* | Down | 13.94 | 1.66x10-9 |
| *GLO1* | Down | 14.06 | 1.66x10-9 |
| *ALOX12B* | Down | 14.08 | 1.66x10-9 |
| *CAPZA2* | Down | 14.09 | 1.66x10-9 |
| *FAM25A* | Down | 15.26 | 1.66x10-9 |
| *SERPINC1* | Down | 15.31 | 1.66x10-9 |
| *GAA* | Down | 15.50 | 1.66x10-9 |
| *NCCRP1* | Down | 15.66 | 1.66x10-9 |
| *RAN* | Down | 15.73 | 1.66x10-9 |
| *SERPINB2* | Down | 16.25 | 1.66x10-9 |
| *CD9* | Down | 16.29 | 1.66x10-9 |
| *TMED10* | Down | 16.51 | 1.66x10-9 |
| *SLC9A3R1* | Down | 16.94 | 1.66x10-9 |
| *HSPA4* | Down | 17.20 | 1.66x10-9 |
| *IVL* | Down | 17.30 | 1.66x10-9 |
| *G6PD* | Down | 17.48 | 1.66x10-9 |
| *DYNLL1* | Down | 18.75 | 1.66x10-9 |
| *IGHV1-2* | Down | 19.58 | 1.66x10-9 |
| *APOD* | Down | 20.15 | 1.66x10-9 |
| *SFTPA2* | Down | 20.34 | 1.66x10-9 |
| *SELENBP1* | Down | 20.42 | 1.66x10-9 |
| *PSMB6* | Down | 20.96 | 1.66x10-9 |
| *CST6* | Down | 21.99 | 1.66x10-9 |
| *HLA-C* | Down | 23.73 | 1.66x10-9 |
| *CAST* | Down | 23.93 | 1.66x10-9 |
| *POF1B* | Down | 24.18 | 1.66x10-9 |
| *SLPI* | Down | 24.34 | 1.66x10-9 |
| *IGHV3-73* | Down | 25.30 | 1.66x10-9 |
| *PARK7* | Down | 25.58 | 1.66x10-9 |
| *PROM1* | Down | 26.92 | 1.66x10-9 |
| *MMP7* | Down | 28.03 | 1.66x10-9 |
| *UNC5C* | Down | 28.03 | 1.66x10-9 |
| *PSMA5* | Down | 28.26 | 1.66x10-9 |
| *SYBU* | Down | 30.35 | 1.66x10-9 |
| *DSG3* | Down | 32.33 | 1.66x10-9 |
| *ENPP4* | Down | 32.66 | 1.66x10-9 |
| *KPRP* | Down | 36.22 | 1.66x10-9 |
| *PHGDH* | Down | 40.03 | 1.66x10-9 |
| *PRSS27* | Down | 41.68 | 1.66x10-9 |
| *APOB* | Down | 42.56 | 1.66x10-9 |
| *JAKMIP2* | Down | 43.72 | 1.66x10-9 |
| *CMPK1* | Down | 45.15 | 1.66x10-9 |
| *PLS3* | Down | 46.51 | 1.66x10-9 |
| *HADHB* | Down | 51.66 | 1.66x10-9 |
| *TG* | Down | 53.42 | 1.66x10-9 |
| *ASPRV1* | Down | 54.25 | 1.66x10-9 |
| *CD2BP2* | Down | 57.47 | 1.66x10-9 |
| *RBP1* | Down | 58.12 | 1.66x10-9 |
| *IGKV1-27* | Down | 63.88 | 1.66x10-9 |
| *CUTA* | Down | 81.64 | 1.66x10-9 |
| *ARCN1* | Down | 86.90 | 1.66x10-9 |
| *DDOST* | Down | 206.72 | 1.66x10-9 |
| *ZMIZ1* | Down | 271.71 | 1.66x10-9 |
| *IGKV1D-13* | Down | 321.05 | 1.66x10-9 |

**Supplemental Table 2C**. Submandibular DEPs

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene Namea** | **Up/Down- Regulatedb** | **Fold Changec** | **p-valued** |
| *IGLV1-51* | Up | 154.63 | 3.25x10-8 |
| *PTMA* | Up | 109.77 | 3.25x10-8 |
| *DPYSL2* | Up | 86.49 | 3.25x10-8 |
| *BPIFB2* | Up | 51.32 | 3.25x10-8 |
| *CHI3L2* | Up | 50.73 | 3.25x10-8 |
| *RAB10* | Up | 43.55 | 3.25x10-8 |
| *RAB11A* | Up | 43.08 | 3.25x10-8 |
| *POF1B* | Up | 31.32 | 3.51x10-8 |
| *CAST* | Up | 27.11 | 3.25x10-8 |
| *CPA4* | Up | 26.79 | 3.58x10-8 |
| *APOD* | Up | 26.37 | 3.51x10-8 |
| *DDX39A* | Up | 24.12 | 3.51x10-8 |
| *HNRNPC* | Up | 23.46 | 3.25x10-8 |
| *IVL* | Up | 19.31 | 3.42x10-8 |
| *A2M* | Up | 18.87 | 3.25x10-8 |
| *PA2G4* | Up | 16.36 | 3.25x10-8 |
| *PHB1* | Up | 16.31 | 3.25x10-8 |
| *RCN1* | Up | 15.44 | 3.25x10-8 |
| *CST6* | Up | 14.19 | 3.25x10-8 |
| *CTSC* | Up | 13.73 | 3.51x10-8 |
| *H3C12* | Up | 13.16 | 3.25x10-8 |
| *PRDX4* | Up | 11.69 | 3.25x10-8 |
| *UGDH* | Up | 11.32 | 3.51x10-8 |
| *CCT3* | Up | 10.54 | 3.25x10-8 |
| *IL6ST* | Up | 10.25 | 3.25x10-8 |
| *CST1* | Up | 4.41 | 1.37x10⁻2 |
| *TUBB2A* | Up | 1.16 | 2.09x10⁻2 |
| *HNRNPU* | Down | 1.59 | 3.48x10⁻2 |
| *METRNL* | Down | 1.71 | 3.83x10⁻2 |
| *VCP* | Down | 6.79 | 1.98x10-9 |
| *TOP2A* | Down | 6.84 | 1.98x10-9 |
| *IGKV2-30* | Down | 7.98 | 1.98x10-9 |
| *CCT4* | Down | 8.00 | 1.98x10-9 |
| *RPL27A* | Down | 9.11 | 1.98x10-9 |
| *LGALS1* | Down | 9.77 | 1.98x10-9 |
| *LAMP1* | Down | 11.08 | 1.98x10-9 |
| *PSMA7* | Down | 11.36 | 1.98x10-9 |
| *ARPC2* | Down | 11.56 | 1.98x10-9 |
| *ALOX12B* | Down | 12.09 | 1.98x10-9 |
| *RPSA* | Down | 12.14 | 1.98x10-9 |
| *RPL7* | Down | 13.31 | 1.98x10-9 |
| *VDAC2* | Down | 13.63 | 1.98x10-9 |
| *RPS3* | Down | 14.13 | 1.98x10-9 |
| *ASAH1* | Down | 14.74 | 1.98x10-9 |
| *RPS20* | Down | 15.05 | 1.98x10-9 |
| *CRYAB* | Down | 16.28 | 1.98x10-9 |
| *QSOX1* | Down | 16.39 | 1.98x10-9 |
| *RPS12* | Down | 18.64 | 1.98x10-9 |
| *IGKV1-8* | Down | 19.49 | 1.98x10-9 |
| *ASPRV1* | Down | 20.97 | 1.98x10-9 |
| *UBE2V1* | Down | 22.37 | 1.98x10-9 |
| *RPS27* | Down | 22.76 | 1.98x10-9 |
| *CCT5* | Down | 25.92 | 1.98x10-9 |
| *MELTF* | Down | 28.61 | 1.98x10-9 |
| *RPLP1* | Down | 31.09 | 1.98x10-9 |
| *CRNN* | Down | 34.56 | 1.98x10-9 |
| *CPQ* | Down | 36.44 | 1.98x10-9 |
| *DSG3* | Down | 37.23 | 1.98x10-9 |
| *IGHV4-28* | Down | 37.76 | 1.98x10-9 |
| *CD2BP2* | Down | 38.88 | 1.98x10-9 |
| *APOH* | Down | 39.93 | 1.98x10-9 |
| *GLUD2* | Down | 43.00 | 1.98x10-9 |
| *PARK7* | Down | 47.43 | 1.98x10-9 |
| *SCAPER* | Down | 48.56 | 1.98x10-9 |
| *IGKV2-28* | Down | 52.92 | 1.98x10-9 |
| *TWF1* | Down | 65.88 | 1.98x10-9 |
| *GLYATL3* | Down | 82.06 | 1.98x10-9 |
| *FAM3D* | Down | 93.26 | 1.98x10-9 |
| *GLG1* | Down | 124.19 | 1.98x10-9 |
| *TIMP1* | Down | 158.63 | 1.98x10-9 |
| *SPATA13* | Down | 189.68 | 1.98x10-9 |
| *FER1L6-AS1* | Down | 201.84 | 1.98x10-9 |
| *PC* | Down | 474.40 | 1.98x10-9 |

**Footnote.** Differentially expressed proteins (DEPs) in xerostomic patients (XP-group) in each salivary gland. The **2A.** left parotid table includes 86 DEPs, with 47 upregulated and 39 downregulated proteins. The **2B.** right parotid table includes 112 DEPs, with 40 upregulated and 72 downregulated proteins. The **2C.** submandibular table includes 73 DEPs, with 27 upregulated and 46 downregulated proteins. Fold changes were calculated as the relative expression difference, using the formula (test - control) / control. For downregulated proteins, fold change values were expressed as the reciprocal (1/ fold change) to facilitate comparison with upregulated proteins. Statistical significance for differential expression calculated with Mann-Whitney U-test, and Benjamini-Hochberg FDR corrected.

**a**Entrez gene name

**b**Upregulation or downregulation of gene in salivary gland

**c**Relative fold change

**d**p-value (Benjamini-Hochberg corrected)