

**Table S9. Real-time PCR validation of genes and transcripts differentially expressed within smoking and cancer by RNA-Seq**

| Smoking      |                 |                                             |                                       |
|--------------|-----------------|---------------------------------------------|---------------------------------------|
| Gene Symbol  | Gene Name       | Microarrays*<br>Log <sub>2</sub> FC (S/NS)  | RNA-Seq<br>Log <sub>2</sub> FC (S/NS) |
| S100A8       | Calgranulin A   | -0.06                                       | 2.76                                  |
| S100A9       | Calgranulin B   | -0.11                                       | 1.87                                  |
| CYP4F2       | Cytochrome p450 | 0.37                                        | 1.84                                  |
| AC004963.2   | LincRNA         | -0.22                                       | -0.69                                 |
| CTD-2325P2.2 | Pseudogene      | N/A                                         | -1.17                                 |
| Cancer       |                 |                                             |                                       |
| Gene Symbol  | Gene Name       | Microarrays**<br>Log <sub>2</sub> FC (C/NC) | RNA-Seq<br>Log <sub>2</sub> FC (C/NC) |
| NFKB1A1      | NFKB inhibitor  | 0.13                                        | 1.21                                  |
| SCGB1A1      | Secretoglobin   | 0.16                                        | 1.60                                  |
| SCGB3A1      | Secretoglobin   | N/A                                         | 1.69                                  |
| CCL20        | Chemokine       | -0.32                                       | 4.59                                  |
| IL8          | Interlukin 8    | -0.38                                       | 1.17                                  |
| CTD-2325P2.2 | Pseudogene      | N/A                                         | 1.19                                  |
| RP11-295J3.2 | ncRNA           | N/A                                         | -0.84                                 |

*\*Affymetrix Exon ST 1.0 microarrays; matched samples*

*\*\*Affymetrix U133A 2.0 microarrays*

*N/A: no probes for this transcript*