

**Table S2. qPCR statistical data****A. Summary Data for qPCR experiments**

| Gland    | Paralog | Male average ng total RNA |       |       | Female average ng total RNA |       |       | Male confidence interval |       |       | Female confidence interval |       |       |
|----------|---------|---------------------------|-------|-------|-----------------------------|-------|-------|--------------------------|-------|-------|----------------------------|-------|-------|
|          |         | M +/+                     | M +/- | M -/- | F +/+                       | F +/- | F -/- | M +/+                    | M +/- | M -/- | F +/+                      | F +/- | F -/- |
| Salivary | a27     | 0.149                     | 0.081 | 0.000 | 0.214                       | 0.119 | 0.000 | 0.056                    | 0.029 | 0.000 | 0.093                      | 0.036 | 0.000 |
| Salivary | bg26    | 0.175                     | 0.219 | 0.135 | 0.252                       | 0.217 | 0.160 | 0.023                    | 0.014 | 0.049 | 0.033                      | 0.031 | 0.110 |
| Salivary | bg27    | 0.043                     | 0.024 | 0.000 | 0.054                       | 0.033 | 0.000 | 0.001                    | 0.005 | 0.000 | 0.006                      | 0.002 | 0.000 |
| Salivary | GAPDH   | 0.133                     | 0.168 | 0.064 | 0.175                       | 0.085 | 0.154 | 0.087                    | 0.107 | 0.343 | 0.085                      | 0.114 | 0.079 |
| Lacrimal | a2      | 0.110                     | 0.100 | 0.054 | 0.087                       | 0.069 | 0.084 | 0.087                    | 0.033 | 0.014 | 0.018                      | 0.011 | 0.041 |
| Lacrimal | bg2     | 0.029                     | 0.025 | 0.016 | 0.027                       | 0.021 | 0.022 | 0.012                    | 0.000 | 0.005 | 0.005                      | 0.004 | 0.004 |
| Lacrimal | a3      | 0.075                     | 0.063 | 0.065 | 0.001                       | 0.001 | 0.001 | 0.026                    | 0.010 | 0.019 | 0.000                      | 0.000 | 0.001 |
| Lacrimal | bg3     | 0.092                     | 0.063 | 0.022 | 0.000                       | 0.000 | 0.000 | 0.094                    | 0.029 | 0.009 | 0.000                      | 0.000 | 0.000 |
| Lacrimal | bg7     | 0.039                     | 0.039 | 0.034 | 0.012                       | 0.010 | 0.009 | 0.007                    | 0.001 | 0.003 | 0.005                      | 0.004 | 0.006 |
| Lacrimal | bg12    | 2.302                     | 1.513 | 0.293 | 0.001                       | 0.000 | 0.001 | 1.545                    | 1.635 | 0.288 | 0.001                      | 0.000 | 0.001 |
| Lacrimal | bg20    | 0.827                     | 0.349 | 0.154 | 0.013                       | 0.015 | 0.052 | 0.874                    | 0.051 | 0.041 | 0.002                      | 0.010 | 0.042 |
| Lacrimal | a24     | 0.059                     | 0.027 | 0.002 | 0.064                       | 0.022 | 0.006 | 0.037                    | 0.008 | 0.001 | 0.019                      | 0.008 | 0.001 |
| Lacrimal | bg24    | 0.202                     | 0.181 | 0.133 | 0.182                       | 0.176 | 0.171 | 0.042                    | 0.013 | 0.036 | 0.054                      | 0.007 | 0.023 |
| Lacrimal | GAPDH   | 0.266                     | 0.922 | 0.205 | 0.153                       | 0.109 | 0.253 | 0.244                    | 0.456 | 0.224 | 0.205                      | 0.045 | 0.156 |

**B. Interaction between gender and genotype, submandibular gland (ANOVA test)**

| Paralog | p---value |
|---------|-----------|
| a27     | 0.20319   |
| bg26    | 0.22662   |
| bg27    | 0.15316   |

**C. Statistical significance of submandibular RNA expression between genotypes (ANOVA test)**

| Paralog | Mean (S.E.)  |              |             | p---value   |              |              |
|---------|--------------|--------------|-------------|-------------|--------------|--------------|
|         | +/+          | +/-          | -/-         | +/+ vs +--- | +/+ vs ---/- | +/- vs ---/- |
| a27     | 0.18 (0.03)  | 0.10 (0.01)  |             | 0.028       |              |              |
| bg26    | 0.21 (0.02)  | 0.22 (0.01)  | 0.15 (0.03) | 0.832       | 0.079        | 0.034        |
| bg27    | 0.05 (0.003) | 0.03 (0.002) |             | 0.0004      |              |              |

**D. Interaction between gender and genotype, lacrimal gland (ANOVA test)**

| Paralog | p---value |
|---------|-----------|
| a2      | 0.514     |
| bg2     | 0.562     |
| a3*     | 1.28E--09 |
| bg3*    | 0.003     |
| bg7     | 3.74E--10 |
| bg12*   | 0.008     |
| bg20    | 2.15E--02 |
| a24     | 0.929     |
| bg24    | 0.788     |

**E. Significance of lacrimal RNA expression between genotypes (Confidence Intervals of the difference of the means)**

| Paralog | Gender | Mean (S.E.)  |               |               | Confidence Intervals |                  |                    |
|---------|--------|--------------|---------------|---------------|----------------------|------------------|--------------------|
|         |        | +/+          | +/-           | -/-           | +/+ vs +---          | +/+ vs ---/-     | +/- vs ---/-       |
| a2      | M      | 0.11 (0.045) | 0.10 (0.168)  | 0.05 (0.007)  | (--0.08, 0.1)        | (--0.03, 0.14)   | (0.01, 0.08)       |
|         | F      | 0.09 (0.009) | 0.07 (0.006)  | 0.08 (0.021)  | (--0.003, 0.04)      | (--0.042, 0.05)  | (--0.06, 0.03)     |
| bg2     | M      | 0.03 (0.006) | 0.02 (0.0001) | 0.02 (0.0006) | (--0.001, 0.02)      | (--0.03, 0.02)   | (0.004, 0.007)     |
|         | F      | 0.03 (0.003) | 0.02 (0.002)  | 0.02 (0.001)  | (--0.005, 0.01)      | (--0.002, 0.01)  | (--0.006, 0.004)   |
| a3*     | M      | 0.08 (0.013) | 0.06 (0.005)  | 0.07 (0.010)  | (--0.02, 0.04)       | (--0.02, 0.04)   | (--0.0005, 0.0002) |
|         | F      | --           | --            | --            | --                   | --               | --                 |
| bg3*    | M      | 0.09 (0.047) | 0.06 (0.015)  | 0.02 (0.006)  | (--0.07, 0.13)       | (--0.02, 0.16)   | (0.009, 0.07)      |
|         | F      | --           | --            | --            | --                   | --               | --                 |
|         | M      | 0.04 (0.004) | 0.04 (0.0007) | 0.03 (0.001)  | (--0.007, 0.007)     | (--0.002, 0.013) | (0.001, 0.008)     |

|       |   |              |              |                |                 |                |                 |
|-------|---|--------------|--------------|----------------|-----------------|----------------|-----------------|
| bg7   | F | 0.01 (0.002) | 0.01 (0.002) | 0.01 (0.003)   | (--0.004,0.009) | (--0.004,0.01) | (--0.006,0.008) |
| bg12* | M | 2.3 (0.788)  | 1.5 (0.834)  | 0.29 (0.147)   | (--1.47,3.04)   | (0.44,3.6)     | (--0.44,2.88)   |
|       | F | ...          | ...          | ...            | -               | -              | -               |
| bg20  | M | 0.83 (0.446) | 0.35 (0.026) | 0.15 (0.021)   | (--0.39,1.35)   | (--0.201,1.55) | (0.129,0.26)    |
|       | F | 0.01 (0.002) | 0.02 (0.005) | 0.05 (0.021)   | (--0.013,0.008) | (--0.08,0.003) | (--0.08,0.007)  |
| a24   | M | 0.06 (0.019) | 0.03 (0.004) | 0.002 (0.0006) | (--0.006,0.07)  | (0.02,0.09)    | (0.016,0.03)    |
|       | F | 0.06 (0.009) | 0.02 (0.004) | 0.006 (0.0007) | (0.02,0.06)     | (0.04,0.08)    | (0.008,0.024)   |
| bg24  | M | 0.20 (0.02)  | 0.18 (0.006) | 0.13 (0.018)   | (--0.022,0.06)  | (0.012,0.124)  | (0.008,0.086)   |
|       | F | 0.18 (0.028) | 0.18 (0.004) | 0.17 (0.012)   | (--0.05,0.06)   | (--0.04,0.069) | (--0.019,0.029) |

\*Male-specific expression

Non-overlapping confidence intervals, indicating there is a significant difference between the means of transcript expression between the two genotypes.