**Supplemental Table S1. Nucleotide mutations and adjacent nucleotide patterns in IgG VH3 mRNA sequences.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Mutation | R:Y Ratio |  |  | Mutation | R:Y Ratio |  |
|  | **5’** | **3’** |  |  | **5’** | **3’** |
| **C → G (Tr)** |  |  |  | **G → C (Tr)** |  |  |
| Control | 4.9 : 1 | 1 : 2.2 |  | Control | 2.7 : 1 | 1 : 2.5 |
| Aviremic | 3.9 : 1 | 1 : 2.6 |  | Aviremic | 3.0 : 1 | 1 : 2.4 |
| Viremic | 4.2 : 1 | 1 : 2.9 |  | Viremic | 2.9 : 1 | 1 : 2.4 |
| p value | 0.47 | 0.45 |  | p value | 0.93 | 0.98 |
| **C → A (Tr)** |  |  |  | **G → A (Ts)** |  |  |
| Control | 3.2 : 1 | 1 : 1.2 |  | Control | 2.1 : 1 | 1 : 3.1 |
| Aviremic | 3.1 : 1 | 1 : 1.3 |  | Aviremic | 2.1 : 1 | 1 : 2.8 |
| Viremic | 4.0 : 1 | 1 : 1.3 |  | Viremic | 2.1 : 1 | 1 : 2.9 |
| p value | 0.37 | 0.60 |  | p value | 0.74 | 0.30 |
| **C → T (Ts)** |  |  |  | **G → T (Tr)** |  |  |
| Control | 4.2 : 1 | 1 : 1.9 |  | Control | 1 : 1.1 | 1 : 3.1 |
| Aviremic | 4.3 : 1 | 1 : 1.8 |  | Aviremic | 1 : 1.0 | 1 : 3.3 |
| Viremic | 3.6 : 1 | 1 : 1.8 |  | Viremic | 1.2 : 1 | 1 : 3.6 |
| p value | 0.28 | 0.80 |  | p value | 0.42 | 0.09 |
|  |  |  |  |  |  |  |
| **A → C (Tr)** |  |  |  | **T → C (Ts)** |  |  |
| Control | 1 : 1.1 | 1.3 : 1 |  | Control | 1.6 : 1 | 2.7 : 1 |
| Aviremic | 1 : 1.2 | 1.1 : 1 |  | Aviremic | 1.5 : 1 | 2.4 : 1 |
| Viremic | 1 : 1.1 | 1.4 : 1 |  | Viremic | 1.5 : 1 | 2.7 : 1 |
| p value | 0.85 | 0.85 |  | p value | 0.10 | 0.76 |
| **A → G (Ts)** |  |  |  | **T → G (Tr)** |  |  |
| Control | 1 : 1.1 | 2.2 : 1 |  | Control | 1 : 1.2 | 2.3 : 1 |
| Aviremic | 1 : 1.0 | 2.0 : 1 |  | Aviremic | 1 : 1.4 | 2.6 : 1 |
| Viremic | 1.2 : 1 | 2.1 : 1 |  | Viremic | 1 : 1.1 | 2.1 : 1 |
| p value | 0.02 | 0.30 |  | p value | 0.52 | 0.93 |
| **A → T (Tr)** |  |  |  | **T → A (Tr)** |  |  |
| Control | 1 : 2.8 | 1 : 2.2 |  | Control | 1.6 : 1 | 4.8 : 1 |
| Aviremic | 1 : 3.6 | 1 : 2.1 |  | Aviremic | 1.7 : 1 | 4.5 : 1 |
| Viremic | 1 : 3.6 | 1 : 2.1 |  | Viremic | 2.4 : 1 | 3.5 : 1 |
| p value | 0.13 | 0.44 |  | p value | 0.17 | 0.23 |

R = A or G; Y = C or T. Mutations: Ts = transition (purine ↔ purine or pyrimidine ↔ pyrimidine); Tr = transversion (purine ↔ pyrimidine).