**Supplementary Table 2: Nucleotide composition and codon position**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Accession** | **%A** | **%C** | **%T** | **%G** | **%A3** | **%C3** | **%T3** | **%G3** | **%GC** | **%GC12** | **%GC3** | **ENC** |
| AM712239.1 | 33.87 | 17.60 | 29.81 | 18.72 | 30.94 | 18.26 | 32.94 | 17.86 | 36.3 | 36.43 | 36.12 | 53.25 |
| AY261360.1 | 34.50 | 16.06 | 31.29 | 18.15 | 31.17 | 15.93 | 35.70 | 17.20 | 34.22 | 34.76 | 33.13 | 51.85 |
| AY261361.1 | 34.01 | 16.71 | 31.20 | 18.08 | 31.13 | 16.67 | 35.34 | 16.86 | 34.81 | 35.42 | 33.52 | 52.11 |
| AY261362.1 | 34.45 | 16.62 | 30.83 | 18.09 | 31.16 | 16.97 | 34.60 | 17.26 | 34.72 | 34.95 | 34.24 | 52.39 |
| AY261363.1 | 34.18 | 16.74 | 30.84 | 18.25 | 31.03 | 17.05 | 34.71 | 17.21 | 34.97 | 35.34 | 34.26 | 52.15 |
| AY261364.1 | 33.53 | 18.10 | 29.37 | 19.01 | 29.93 | 19.32 | 32.16 | 18.59 | 37.09 | 36.71 | 37.93 | 53.68 |
| AY261365.1 | 34.34 | 16.90 | 30.55 | 18.21 | 31.42 | 17.44 | 34.10 | 17.04 | 35.11 | 35.43 | 34.49 | 51.8 |
| AY261366.1 | 33.84 | 17.68 | 29.86 | 18.62 | 30.83 | 18.28 | 33.18 | 17.71 | 36.29 | 36.45 | 36.00 | 52.46 |
| FN557520.1 | 34.16 | 16.42 | 30.91 | 18.52 | 30.81 | 16.50 | 35.08 | 17.60 | 34.93 | 35.36 | 34.11 | 52.51 |
| KM102979.1 | 33.88 | 17.59 | 29.82 | 18.71 | 30.94 | 18.24 | 32.96 | 17.86 | 36.3 | 36.40 | 36.10 | 53.24 |
| KM111294.1 | 33.95 | 16.46 | 31.23 | 18.36 | 30.82 | 16.37 | 35.22 | 17.60 | 34.82 | 35.25 | 33.95 | 53.12 |
| KM111295.1 | 33.38 | 17.74 | 30.12 | 18.77 | 29.73 | 18.13 | 33.71 | 18.43 | 36.5 | 36.48 | 36.56 | 53.9 |
| KM262844.1 | 33.86 | 17.60 | 29.81 | 18.73 | 30.94 | 18.26 | 32.94 | 17.86 | 36.32 | 36.44 | 36.12 | 53.9 |
| KM262845.1 | 33.33 | 18.24 | 29.12 | 19.30 | 30.13 | 19.21 | 32.31 | 18.35 | 37.55 | 37.54 | 37.57 | 53.21 |
| KP843857.1 | 34.27 | 16.80 | 30.68 | 18.25 | 30.40 | 17.58 | 34.63 | 17.39 | 35.05 | 35.08 | 34.98 | 52.46 |
| MG939584.1 | 34.44 | 16.89 | 30.49 | 18.18 | 31.22 | 17.47 | 34.03 | 17.28 | 35.08 | 35.24 | 34.75 | 51.89 |
| MH025916.1 | 33.15 | 17.65 | 30.36 | 18.85 | 28.41 | 18.72 | 33.29 | 19.58 | 36.49 | 35.60 | 38.30 | 54.89 |
| MH025919.1 | 33.27 | 17.54 | 30.40 | 18.79 | 28.52 | 18.67 | 33.31 | 19.50 | 36.32 | 35.42 | 38.17 | 55.07 |
| MH766894.2 | 34.43 | 16.89 | 30.50 | 18.19 | 31.22 | 17.47 | 34.03 | 17.28 | 35.07 | 35.24 | 34.75 | 51.98 |
| MK940252.1 | 34.42 | 16.88 | 30.51 | 18.20 | 31.20 | 17.45 | 34.05 | 17.31 | 35.08 | 35.24 | 34.75 | 51.92 |
| MN194591.1 | 34.13 | 17.06 | 30.32 | 18.49 | 29.96 | 18.18 | 33.48 | 18.38 | 35.55 | 35.05 | 36.57 | 53.24 |
| MN318203.3 | 31.50 | 19.48 | 32.08 | 16.94 | 27.88 | 21.06 | 34.33 | 16.72 | 36.43 | 35.74 | 37.79 | 52.69 |
| MN336500.3 | 31.72 | 19.09 | 31.57 | 17.62 | 30.36 | 19.45 | 33.22 | 16.97 | 36.71 | 36.86 | 36.43 | 53.15 |
| MN394630.3 | 31.70 | 19.21 | 31.46 | 17.63 | 29.76 | 19.65 | 33.61 | 16.98 | 36.82 | 36.95 | 36.63 | 53.13 |
| MN630494.2 | 33.55 | 18.04 | 30.05 | 18.37 | 31.05 | 18.26 | 32.83 | 17.86 | 36.41 | 36.53 | 36.14 | 51.84 |
| MN641876.2 | 32.54 | 18.62 | 30.84 | 18.00 | 30.36 | 18.86 | 33.48 | 17.30 | 36.61 | 36.85 | 36.16 | 53.2 |
| MN641877.2 | 33.70 | 17.67 | 30.68 | 17.96 | 31.08 | 17.83 | 33.90 | 17.19 | 35.62 | 35.94 | 35.03 | 52.45 |
| MN913970.1 | 34.40 | 16.72 | 30.71 | 18.18 | 31.15 | 17.23 | 34.20 | 17.42 | 34.9 | 35.02 | 34.66 | 52.71 |
| MT872723.1 | 34.43 | 16.89 | 30.49 | 18.19 | 31.22 | 17.47 | 34.03 | 17.28 | 35.08 | 35.26 | 34.75 | 51.93 |
| MT956648.1 | 33.06 | 17.66 | 30.24 | 19.04 | 29.23 | 18.03 | 33.41 | 19.33 | 36.7 | 36.37 | 37.34 | 53.54 |
| MW361944.1 | 34.58 | 16.81 | 30.53 | 18.09 | 31.34 | 17.31 | 34.09 | 17.26 | 34.89 | 35.07 | 34.58 | 51.81 |
| MW465755.1 | 30.32 | 22.47 | 26.74 | 20.47 | 23.82 | 24.49 | 29.02 | 22.67 | 42.96 | 40.82 | 47.16 | 56.1 |
| MW656282.1 | 34.43 | 16.89 | 30.49 | 18.19 | 31.22 | 17.47 | 34.03 | 17.28 | 35.08 | 35.26 | 34.75 | 51.93 |
| MW723481.1 | 33.86 | 17.60 | 29.81 | 18.73 | 30.94 | 18.26 | 32.94 | 17.86 | 36.32 | 36.44 | 36.12 | 53.26 |
| MW723488.1 | 33.85 | 17.54 | 29.95 | 18.66 | 30.83 | 18.20 | 33.11 | 17.87 | 36.2 | 36.27 | 36.08 | 52.91 |
| MW736611.1 | 33.86 | 17.53 | 29.96 | 18.65 | 30.83 | 18.18 | 33.13 | 17.87 | 36.18 | 36.25 | 36.06 | 52.92 |
| MW788405.1 | 33.66 | 17.52 | 30.06 | 18.77 | 30.43 | 18.03 | 33.55 | 18.00 | 36.29 | 36.42 | 36.03 | 53.07 |
| MW788406.1 | 33.89 | 17.65 | 29.82 | 18.65 | 31.03 | 18.28 | 32.93 | 17.77 | 36.3 | 36.43 | 36.05 | 53.31 |
| MW788407.1 | 33.89 | 17.65 | 29.82 | 18.65 | 31.03 | 18.28 | 32.93 | 17.77 | 36.3 | 36.43 | 36.05 | 53.31 |
| MW788409.1 | 33.03 | 17.06 | 30.91 | 19.00 | 28.49 | 18.26 | 34.31 | 18.95 | 36.06 | 35.49 | 37.21 | 54.76 |
| MW856067.1 | 33.60 | 17.03 | 30.74 | 18.63 | 30.17 | 17.37 | 34.71 | 17.76 | 35.65 | 35.93 | 35.12 | 52.27 |
| MW856068.1 | 33.96 | 17.80 | 29.56 | 18.68 | 30.85 | 18.57 | 32.62 | 17.96 | 36.48 | 36.46 | 36.53 | 52.62 |
| MZ202520.1 | 34.35 | 16.74 | 30.75 | 18.17 | 31.39 | 17.23 | 34.31 | 17.07 | 34.91 | 35.21 | 34.30 | 52.41 |
| MZ325862.1 | 34.43 | 16.89 | 30.50 | 18.19 | 31.22 | 17.47 | 34.03 | 17.28 | 35.08 | 35.25 | 34.75 | 51.93 |
| NC\_001659.2 | 33.02 | 19.13 | 28.26 | 19.59 | 29.57 | 20.74 | 30.28 | 19.40 | 38.72 | 38.00 | 40.15 | 54.44 |
| OL322096.1 | 34.43 | 16.89 | 30.49 | 18.19 | 31.22 | 17.47 | 34.03 | 17.28 | 35.08 | 35.26 | 34.75 | 51.93 |
| OL322098.1 | 34.42 | 16.91 | 30.48 | 18.19 | 31.21 | 17.51 | 34.03 | 17.25 | 35.1 | 35.28 | 34.77 | 52.03 |
| OL322100.1 | 34.51 | 16.65 | 30.75 | 18.09 | 30.48 | 17.38 | 34.81 | 17.33 | 34.73 | 34.76 | 34.72 | 52.41 |
| OL322101.1 | 34.43 | 16.89 | 30.49 | 18.19 | 31.22 | 17.47 | 34.03 | 17.28 | 35.08 | 35.26 | 34.75 | 51.93 |
| OL322102.1 | 34.43 | 16.89 | 30.49 | 18.19 | 31.22 | 17.47 | 34.03 | 17.28 | 38.4 | 38.20 | 38.90 | 50.6 |
| OM161110.1 | 34.43 | 16.90 | 30.48 | 18.19 | 31.22 | 17.49 | 34.01 | 17.28 | 35.08 | 35.26 | 34.77 | 51.93 |
| OM481276.1 | 34.15 | 16.84 | 30.44 | 18.57 | 30.41 | 17.67 | 33.82 | 18.10 | 35.41 | 35.23 | 35.78 | 52.58 |
| OM799941.1 | 34.43 | 16.89 | 30.49 | 18.18 | 31.22 | 17.47 | 34.03 | 17.28 | 35.08 | 35.25 | 34.75 | 51.89 |
| ON185726.2 | 33.86 | 17.60 | 29.81 | 18.73 | 30.94 | 18.26 | 32.94 | 17.86 | 36.32 | 36.44 | 36.12 | 53.26 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **MAX** | **34.58** | **22.47** | **32.08** | **20.47** | **31.42** | **24.49** | **35.70** | **22.67** | **42.96** | **40.82** | **47.16** | **56.10** |
| **MIN** | **30.32** | **16.06** | **26.74** | **16.94** | **23.82** | **15.93** | **29.02** | **16.72** | **34.22** | **34.76** | **33.13** | **50.60** |
| **AVG** | **33.77** | **17.45** | **30.33** | **18.44** | **30.49** | **18.08** | **33.64** | **17.79** | **35.95** | **35.96** | **35.95** | **52.80** |
| **STD** | **0.86** | **1.01** | **0.80** | **0.52** | **1.24** | **1.30** | **1.10** | **0.95** | **1.35** | **1.05** | **2.10** | **0.99** |