

**Table S3. List of nucleotide sequences used for the positive selection analysis.**

Bird species	Accession (NCBI or Ensembl)	Nucleotide sequence (mature region)	Protein accession (NCBI or Ensembl)
<i>Apteryx rowi</i>	XM_026061083.1	TTGCCTAAAGACACCTTACGTTGTGTTGCCTACCATGGTTTCTGCTTCCGTTT AAAAGCCTGCCCCAGCACCTTTTGTGTCATTTGGAACCTGCTCTCGGCGTCAGA AAACCTGCTGCATAGACACTACATCAAACCTCCATATTTGTAAAGATGAGGG GGGTCATTGCGTACCTCCAGAAATCAAATGTTTCCAAGAACATCTGGGACTT TGCCCTCGCAAAGAATGGAAGTGCTGCAAAGAAATGCAA	XP_025916868.1
<i>Dromaius novaehollandiae</i>	XM_026113496.1	TTGCCTAGACACACCTTACATTGTGTTGCCTACCATGGTTACTGCTTCCATT AAAAGTCTGCCCCAACGCCCTTTTGTGTCATTTGGAACCTGCTCTCGGCGTCAGA AAACCTGCTGCATAGATACTACATCAAACCTCCATATTTGTAAAGATGAGGG GGGTCATTGCGTACCTCCAGAAATCGAATGTCTTCAAGAACAGCTGGGACTT TGCCCTCACAAGAATGGAAGTGCTGCAAGGAAATGCAA	XP_025969281.1
<i>Chauna torquata</i>	VXAL01001524.1	TTGCCCCAAGACACCTTACGTTGTGTTGGCTACCATGGTTTCTGCTTCCGCTC AAAAGTCTGCCCCAACACCATTTTGTGTCATTTGGAACCTGCTCTTGGCGTCAGA AAACCTGCTGCATAGACACTACATCAAACCTTGCATACCTGTCAAGATGAAGG GGGCCATTGTGTACCTCCGAAAATCAGATGTCTGCAAGAAGAACAGCTGGGACTT TGCCCTCACAGAAATGGAAGTGCTGCAAAGAAGTG	NXK44927.1
<i>Anseranas semipalmata</i>	VXAA01000532.1	TTGCCCCAAGACACCTTACGCTGTGTTGCTACCATGGTTTCTGCTTCCATT AGAAGTCTGCCCCAACACCATTTTGTGTCATTTGGAACCTGCTCTCGCTGCAG AAACCTGCTGCATAGACACTACATCAAACCTTCCATACTGTCAAGATGAAGG GGGCCATTGCGTACCTCCAAAAATCAAATGTCTGCAAGAAGAACAGCTGGGACTT TGCCCTCACAAGGAATGGAAGTGCTGCAAAGAAGTG	NXI61744.1
<i>Anser cygnoides domesticus</i>	XM_013184427.1	TTGCCCCAAGACACCTTACGTTGTGTTGCTACCATGGTTTCTGCTTCCAAAC AAAAGCCTGCCCCAACGCCATTTTGTGTCATTTGGAACCTGCTCTGAACGTCAG AAACCTGCTGCATAGACGCTACATCAAACCTCCATACTGTCAAGAAGAAG GGGGCCATTGCGTACCTCCGAAAATCAAATGTCTGCAAGGGCAGCTGGGACTT TTGCCCTCGCAAAGGATGGAAGTGCTGCAAAGAAGTGCAA	XP_013039881.1
<i>Cygnus atratus</i>	XM_035563646.1	TTGCCCCAAGATACCTTACGTTGTGTTGCTACCATGGTTTCTGCTTCCAACC AAAAGCCTGCCCCACCGCCATTTTGTGTCATTTGGAACCTGCTCTGAACGTCAG AAACCTGCTGCATAGACGCTACATCAAACCTCCATACTGTCAAGAAGAAG GGGGCCACTGCGTACCTCCGAAAATCAAATGTCTGCAAGGGCAGCTGGGACTT TTGCCCTCGCAAAGGATGGAAGTGCTGCAAAGAAGTGCAA	XP_035419539.1
<i>Anas platyrhynchos</i>	XM_005028246.4	TTGCCCCAAGACACCTTACGTTGTGTTGCTACCATGGTTTCTGCTTCCAACC AAAAGCCTGCCCCACCGCCGTTTGTGTCATTTGGAACCTGCTCTCAACGTCAG AAACCTGCTGCATAGACACTACATCAAACCTCCATACTGTCAAGAAGAAG GGGGCCATTGCGTACCTCCGAAAATCAAATGTCTGCGAGGGCAGCTGGGACTT TTGCCCTCGCAAAGGATGGAAGTGCTGCAAAGAGATG	XP_005028303.2
<i>Odontophorus gujanensis</i>	VXAB01005760.1	TTGCCCCAGAGACACCTACGTTGTGTTGGCTACCATGGGTACTGCATCCGTTT CAAAGTCTGTCCCAAACCATTTTGTGCTTTTGGAACTTGCTCTTGGCGTCAGA AAACCTGCTGCGTAGATACTACATCAGACTTCCATACTGTCAAGATGAGGG GGGCCATTGCGTATCTCCAAAAATCAGATGTCTGCAAGAAGAACAGCTGGGACTT TGCCCTCTAAAAAATGGAAGTGCTGCAGAGAAATA	NXJ08707.1
<i>Meleagris gallopavo</i>	ENSMGAT00000015987.1	TTGCCCCAGAGACACCTACGTTGTGTTGGCTACCATGGGTACTGCATCCGTTT CAAAGTCTGCCCCAACCGTTTGTGTCATTTGGAACCTGCTCTTGGCGTCAGA AAACCTGCTGTGTAGACGCTACATCAGCTTCCATAATTTGTCAAGACGAGGG AGGCCATTGTGTATCTCCAAAAATCAGATGTCTGCAAGAAGAACAGCTGGGACTT TGCCCTCTGAAAAAATGGAAGTGCTGCAAAGAAATA	ENSMGAP00000015039.1
<i>Coturnix japonica</i>	XM_015859649.2	TTGCCCCAGAGACACCTACGTTGTGTTGGCTACCATGGGTACTGCATCCGTTT CAAAGTCTGCCCCAACCATTTTGTGTCATTTGGAACCTGCTCTTGGCGTCGGG AAACCTGCTGTGTAGACACCATCAAACTTCCATACCTGTCAAGACGAGGG GGGCCATTGTGTATCTCCAAAGATCAGATGTTTGAAGAAGAACAGATGGGACTC TGCCCTCTAAAAAATGGAAGTGCTGCAAAGAAATA	XP_015715135.1
<i>Gallus gallus</i>	NM_001001779.1	TTGCCCCAGAGACACCTACGTTGTGTTGGCTACCATGGGTACTGCATCCGTTT CAAAGTCTGCCCCAACCATTTTGTGTCATTTGGAACATGCTCTTGGCGTCAGA AAACCTGCTGCGTAGACACTACATCAGACTTCCATACTGTCAAGACGAGGG GGGCCATTGCGTATCTCCAAAAATCAGATGTCTGGAAGAAGAACAGCTGGGACTT TGCCCTCTAAAAAATGGAAGTGCTGCAAAGAAATA	NP_001001779.1
<i>Columba livia</i>	XM_005513638.2	TTGCCCCAAGACACCTTACGTTGTGTTGATATCATGGTTTCTGCTTCCATT CAAATCCTGCCCCAAGCCATTTTGTGTCATTTGGAACCTGCTCTTGGCGTCAGA AAACCTGCTGCATAGACACGACATCAAACCTTCCATACTGTCAAGATGAGGG AGGTCAATTGTGTGCTCCAGAAATCAAATGTCTGCAAGAACAAGTGGGACTT TGCCCTCACAGAGGATGGAAGTGCTGCACAGAATTG	XP_005513695.1
<i>Aramus guarauna</i>	VXBL01010431.1	TTGCCCCAAGACACCTTACGTTGTGTTGGATATCATGGTTTCTGCTTCCATT AAAATCCTGCCCCAGAGCCGTTTGTGCGTTTGGAACTTGCTCTCGGCGCCAG AAACCTGCTGCATAGACACGACATCAAACCTTCCATACCTGTCAAGACGACG GGGGTCATTGCGTACCTCCAGAAATCAAATGTCTGCAAAAGCAGATGGGACTT TTGCCCTCACAGAGGATGGAAGTGCTGCACAGAAGTG	NXO60882.1
<i>Charadrius vociferus</i>	KL872452.1	TTGCCCCAAGACACCTTACGTTGTGTTGGATACCATGGTTTCTGCTTCCGTTT AAAATCCTGCCCCAGAGCCATTTTGTGCGTTTGGAACTTGCTATCGGCGTCAG AAACCTGCTGCATAGACACAACATCGAACTTCCATACTGTCAAGACGAGG GGGGTCATTGCGTACCTCCAGAAATCAAATGTCTGCAAGAACAAGTGGGACTT TTGCCCTCACAGAGAATGGAAGTGCTGCACAGAAGTG	KGL95683.1
<i>Rostratula benghalensis</i>	VXAI01000254.1	TTGCCCCAAGACACCTTACGTTGTGTTGGATACCATGGTTTCTGCTTCCATT AAAATCCTGCCCCAGGGCCATTTGTTACATTTGGAACCTTGCTCTCGGCGTCGGA AAATGTGCTGCATAGACACAACATCAAACCTTCCATACGTGTCAAGCTGAGGG GGGTCACTGTGTACCTCCAGAAATCAAATGTCTGCAGCAACAAGTGGGACTC TGCCCTCACAGGAAATGGAAGTGCTGCACAGAAGTG	NXJ68321.1
<i>Pedionomus torquatus</i>	VZRU01010140.1	TTGCCCCAAGACACCTTACGTTGTGTTGGATACCATGGTTTCTGCTTCCGTTT AAAATCCTGCCCCAAGCCATTTGCGCATTTGGAACCTTGCTCTTGGCGTCAGA AAACCTGCTGCATAGACACGACATCAAACCTTCCATACTGTCAAGATGAGGG GGGTCACTGTGTACCTCCAAAAATCAAATGTCTGCAACAGCAAGTGGGACTT TGCCCTCACAGGAAATGGAAGTGCTGCACAGAAGTG	NWW48347.1

<i>Thinocorus orbignyianus</i>	VXBW01005935.1	TTGCCCAAAGACACCTTACGTTGTGTTGGATACCGTGGTTTCTGCTTCCGTTCAAATCCTGCCACGGCCGTTTGCTGCATTGGAACTTGCTCTTGGCGTCAGAAACCTGCTGCATAGACACGACATCAAACCTTCCATCTTGCCAAGATGAGGGGGTCACTGTGTGCCTCCAAAAATCAAATGTCTGCAACAGCAAGTGGGACTTTGCCCTCACAGGAAATGGAAGTGCTGCACAGAAGTG	NXP11758.1
<i>Arenaria interpres</i>	VXAK01013874.1	TTGCCCAAAGACACCTTACGTTGTGTTGGATACCATGTTTCTGCTTCCGTTCAAATCCTGCCAGAGCCATTTGCTGCGTTTGGAACTTGCTCTTGGCGTCAGAAACCTGCTGCATAGACACGACATCAAACCTTCCATCTTGCTCAAGACGAAGGGGTCACTGTGTACCTCCAAAAATCAAATGTCTGCAACAACAAGTGGGACTTTGCCCTCACAGGAAATGGAAGTGCTGCACAGAAGTG	NXK22639.1
<i>Calidris pugnax</i>	XM_014948388.1	TTGCCCAAAGACACCTTACGTTGTGTTGGATACCAACGGTTTCTGCTTCCGTTCAAATCCTGCCAGAGCCATTTGCTGCGTTTGGAACTTGTTCTTGGCGTCAGAAACCTGCTGCATAGACACGACCTCAAACCTTCCATCTTGCTCAAGACGAAGGGGTCACTGTGTATCTCCAAAAATCAAATGTCTGCAACAACAAGTGGGACTTTGCCCTCACAGGAAATGGAAGTGCTGCACAGAAGTG	XP_014803874.1
<i>Sula dactylatra</i>	WEKW01013102.1	ATGCCCAAAGACACCTTACGCTGTGTTGGATACCAACGGTTTCTGCTTCCATTCAAATCCTGCCAGAGCCATTTGCCCGGATTGGAACTTGCTCTCGGCGTCAGAAAACCTGCTGCATAGACACGACATCAAACCTTCCATCTTGCTCAAGACGAGGGGTCACTGTGTACCTCCAGAAATCAAATGTCTGCAAGAACAAGTGGGACTTTGCCCTCACAGAGAATGGAAGTGCTGCACAGAAGTG	NWI27162.1
<i>Pelecanus crispus</i>	XM_009490075.1	ATGCCCAAAGACACCTTACGTTGTGTTGGATACCATGTTTCTGCTTCCATTCAAATCCTGCCAGAGCCGTTCCGCCGCTTTGGAACTTGCTCTCGGCGTCAGAAAACCTGCTGCATAGACACGACATCAAACCTTCCATCTTGCTCAAGATGAGGGGTCACTGTGTACCTACAGAAATCAAATGTCTGCAAGAACAAGTGGGACTTTGCCCTCATAGAGAATGGAAGTGCTGCACAGAAGTG	XP_009488350.1
<i>Colius striatus</i>	XM_010204885.1	TTGCCCAAAGACACCTCGCATTTGCTTGGATATGAAGTTTCTGCTTCCGATCAAATCCTGCCAGAGCCATTTGCTGCATTTGGAACTTGCTTGGGGTCAGAAAACCTGCTGCATAGACACAACATCAAACCTACCATAGTTGTGAAGACAAGGAGGGTCATTGCGTGCCTCCAGAAATCAAATGTCTGCAAGAACAAGTGGGGCTCTGCCCTCACAGAGAATGGAAGTGCTGCACAGAAGTG	XP_010203187.1
<i>Trogon melanurus</i>	VXAG01001209.1	TTGCCCAAAGACACCTTACGTTGTCTTGGATACCAACGGTTATTGCTTCCATTCAAATCCTGCCAGAACCATTCGCCGCGTTTGGAACTTGCTCTCGGCGTCAGAAAACCTGCTGCATAGACACGACATCAAATTTCCATCTTGCTCAAGATGAGGGGTCACTGTGTACCTCCAGAAATCGAATGTCTGCAAGAACAAGTGGGACTTTGCCCTCACAGAGGATGGAGGTGCTGCACAGAAGTG	NXJ83125.1
<i>Buceros rhinoceros silvestris</i>	KL517598.1	TTACCCAAAGACACCTTACGTTGTGTTGGATACCATGTTTCTGCTTCCATTCAAATCCTGCCAGAGCCGTTTGCCGCGTTTGGAACTTGTTCTCGGCGTCAGAAACCTGCTGCATCGACACGACATCAAACCTTCCATATCTGTCAAGATGAGGGGGTCACTGTGTACCTCCAGAAATCGAATGTCTGCAAGAACAAGTGGGACTTTGCCCTCATGGAAAAATGGAAGTGCTGCACAGAAGTG	KFO88553.1
<i>Ceyx cyanopectus</i>	VYZU01073949.1	TTGCCCAAAGACACCTTACGTTGTCTTGGATACCAACGGTTCTGCTTCCGTTCAAATCCTGCCAGAGCCATTTGCTGCTTTTGGAACTTGCTCTTGGCGTCACAAACATGCTGCATAGACACGACATCAAATACCAGCACTTGCCAAGATGAGGGGTCACTGTGTACCTCAAAAAATCAAATGTGTGCAAGAACAAGTGGGACTTTGCCCTCACAGAGAATGGAAGTGCTGCACAGAAGTA	NXY89543.1
<i>Furnarius figulus</i>	VYZD01000216.1	TTGCCCAAAGACACCTGCGTTGTTTGGAAATACCACGGCTACTGCTTCCATTTGAAATCCTGCCAGAGCCATTTGCTGCGTTTGGAACTTGCTACCGGCGTCGGAAAACCTGCTGTGTGGACACAACATCCATCTCCACATTTGTGCGAGAGGAGGGGTCACTGTGTAGCCCCACACATCAGGTGCCTGCAAGAACAAGTGGGACTCTGCCCTCGCAGGGGATGGAAGTGCTGCTCAGAATTG	NWR87765.1
<i>Pseudopodoces humilis</i>	XM_005528784.1	TTGCCAGAGACACCTTGCCTGTGTTTGGAAATACCACGGCTACTGCTTCCATCTGAAATCCTGCCAGAGCCGTTTGCTGCCTTTGGAACTTGCTACCGGCGCCCGAGGACCTGCTGCGTTGACACGACATCCAACCTTCCACATCTGCCAAGATGAGGGGCCACTGTGTGCCCCAGAAATCAAATGTCTGCAAGAGCAAGAGGGACTCTGCCCTCGCAGAGGATGGAAGTGCTGCACAGAAGTG	XP_005528841.1
<i>Zosterops hypoxanthus</i>	VWYL01016114.1	TTGCCAAGGGACACCCAGCGCTGTTTGGAAACACCACGGTTACTGCTTCCACCTGAAATCCTGCCCGGAGCCGTTTGCTGCCTTTGGAAGCTGCTACCGGCGCCGGAGGACCTGCTGTGTGACACGACATCCAACCTTCCATGCCTGCCAGGATGAGGGGGCCACTGTGTGTCCCGAGAAATCAGATGTCTGCAAGAGCAAGAGGGACTCTGCCCCCGCAGAGGATGGAAGTGCTGCTCAAAAGTG	NXR36414.1
<i>Catharus ustulatus</i>	XM_033056724.1	TTGCCAAGGGACACCTTACGTTGTTTGGAAACACCACGGTTACTGCTTCCACCTGAGATCCTGCCCGGAGCCGTTTGCCCGCTTCCGGGACCTGCTACCGGCGCCCGAGGACCTGCTGTGTGGACACAACATCCAACCTTCCACATCTGCCAGCAGCAGGGGCCACTGTGTGTGCCCCAGAAATCAGATGTGTGCAAGAAGCAGGAGGGGCTCTGCCCTCGCAGAGGATGGAAGTGCTGCACAGAAGTG	XP_032912615.1
<i>Taeniopygia guttata</i>	XM_002186628.3	TTGCCAAGGGACACCTGCGTTGTTTGGAAATACCACGGCTACTGCTTCCACCTGAAATCCTGCCAGAGCCGTTGCTGCTTTTGGAACTTGCTATCGGCGCCCGAGGACCTGCTGCCTTGACACGACATCCAACCTTCCACATCTGCCAAGATGAGGGGCCATTGTGTCCCCCAGAAATCAGATGTCTGCAAGAGCAAGAGGGACTCTGCCCTCGCAGAGGATGGAAGTGCTGCACAGAAGTG	XP_002186664.2