**Comparative genome analyses reveal distinct structure in the saltwater crocodile MHC**

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**Table S3.** List of GenBank sequences (MHC class I and II variants) used for the current phylogenetic analyses

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Dataset** | **Class** | **Species** | **Variant name** | **Accession** **no.** |
| MHC class I  | Reptilia | *Crocodylus porosus* (saltwater crocodile) | *Crpo01* | HQ158304 |
| exons 3 and 4 |  |  | *Crpo05* | HQ158308 |
| [1] |  | *Crocodylus acutus* (American crocodile) | *Crac04* | HQ158328 |
|  |  |  | *Crac05* | HQ158329 |
|  |  | *Crocodylus palustris* (mugger crocodile) | *Crpa01* | HQ158330 |
|  |  |  | *Crpa02* | HQ158331 |
|  |  |  | *Crpa03* | HQ158332 |
|  |  | *Crocodylus siamensis* (Siamese crocodile) | *Crsi02* | HQ158334 |
|  |  | *Crocodylus jonsoni* (freshwater crocodile) | *Crjo01* | HQ158348 |
|  |  | *Crocodylus mindorensis* (Philippine crocodile) | *Crmi02* | HQ158355 |
|  |  |  | *Crmi03* | HQ158356 |
|  |  | *Mecistops cataphractus* (African slender- snouted | *Meca01* | HQ158366 |
|  |  | crocodile) | *Meca02* | HQ158367 |
|  |  | *Alligator mississippiensis* (American alligator) | *Almi01* | HQ158319 |
|  |  | *Alligator sinensis* (Chinese alligator) | *Alsi01* | HQ158339 |
|  |  |  | *Alsi03* | HQ158341 |
|  |  | *Caiman crocodylus* (spectacled caiman) | *Cacr01* | HQ158335 |
|  |  |  | *Cacr02* | HQ158336 |
|  |  | *Caiman latirostris* (broad-snouted caiman) | *Cala02* | HQ158361 |
|  |  |  | *Cala03* | HQ158362 |
|  |  |  | *Cala05* | HQ158364 |
|  |  | *Melanosuchus niger* (black caiman) | *Meni02* | HQ158358 |
|  |  | *Sphenodon punctatus* (tuatara) | *Sppu-U\*01*  | DQ145788 |
|  |  |  | *Sppu-U\*02*  | DQ145789 |
|  | Aves | *Gallus gallus* (chicken) | *BFa1* | AL023516 |
|  |  |  | *BFa2* |  |
|  |  | *Coturnix japonica* (quail) | *Coja-B1* | AB078884 |
|  |  |  | *Coja-D1* |  |
|  |  |  | *Coja-D2* |  |
|  |  |   | *Coja-E*  |  |
|  |  | *Anas platyrhynchos* (mallard) | *Anpl-UAA* | AY885227 |
|  |  |  | *Anpl-UBA* |  |
|  |  |  | *Anpl-UDA* |  |
|  | Osteichthyes (outgroup) | *Oncorhynchus mykiss* (rainbow trout) | *Onmy-UBA* | AF287487 |
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| (Cont.) |  |  |  |  |
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| **Dataset** | **Class** | **Species** | **Variant name** | **Accession** **no.** |
| MHC class IIA  | Reptilia | *Crocodylus niloticus* (Nile crocodile)  | *Crni-DA01* | GU126929 |
| exons 2 and 3 |  | *Crocodylus acutus* (American crocodile)  | *Crac-DA01* | GU126934 |
| [2] |  | *Crocodylus palustris* (mugger crocodile)  | *Crpa-DA01* | GU126942 |
|  |  | *Crocodylus siamensis* (Siamese crocodile)  | *Crsi-DA01* | GU126944 |
|  |  | *Crocodylus rhombifer* (Cuban crocodile)  | *Crrh-DA01* | GU126951 |
|  |  | *Crocodylus jonsoni* (freshwater crocodile) | *Crjo-DA01* | GU126954 |
|  |  | *Crocodylus novaeguineae* (New Guinea crocodile)  | *Crno-DA02* | GU126953 |
|  |  | *Crocodylus moreletii* (Morelet's crocodile)  | *Crmo-DA02* | GU126938 |
|  |  | *Crocodylus mindorensis* (Philippine crocodile) | *Crmi-DA01* | GU126950 |
|  |  | *Osteolaemus tetraspis* (Dwarf crocodile)  | *Oste-DA02* | GU126936 |
|  |  | *Mecistops cataphractus* (African slender- snouted | *Meca-DA01* | GU126931 |
|  |  | crocodile) |  |  |
|  |  | *Paleosuchus palpebrosus* (Cuvier's dwarf caiman)  | *Papa-DA01* | GU126941 |
|  |  | *Caiman yacare* (Yacare caiman)  | *Caya-DA01* | GU126955 |
|  |  | *Caiman latirostris* (broad-snouted caiman) | *Cala-DA01* | GU126948 |
|  |  | *Melanosuchus niger* (black caiman) | *Meni-DA01* | GU126939 |
|  |  | *Caiman crocodilus* (caiman) | *Cacr-A* | AF256650 |
|  | Aves | *Gallus gallus* (chicken) | *Gaga-BLA* | AY357253 |
|  |  | *Anas platyrhynchos* (mallard)  | *Anpl-DRA* | AY905539 |
|  | Mammalia | *Felis catus* (domestic cat) | *Feca-DRA* | EU915361 |
|  |  | *Zalophus californianus* (sea lion) | *Zaca-DRA* | AY491455 |
|  |  | *Sus scrofa* (pig) | *SLA-DRA\*01* | DQ883224 |
|  |  | *Capra hircus* (goat) | *Cahi-DRA* | AB008754 |
|  |  | *Ovis aries* (sheep) | *Ovar-DRA* | FM986335 |
|  |  | *Macaca fascicularis* (macaque) | *Mafa-DRA* | AB306651 |
|  |  | *Macaca mulatta* (rhesus monkey) | *Mamu-DRA* | NM\_001134298 |
|  |  | *Mus musculus* (mouse) | *H2-Ea* | BC106107 |
|  |  | *Homo sapiens* (human) | *HLA-DRA* | NM\_019111 |
|  |  |  | *HLA-DQA1* | NM\_002122  |
|  |  |  | *HLA-DOA* | NM\_002119 |
|  |  |  | *HLA-DPA1* | NM\_033554 |
|  | Osteichthyes (outgroup) | *Oncorhynchus mykiss* (rainbow trout) | *Onmy-DAA* | FR688130 |
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| (Cont.) |  |  |  |  |
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| **Dataset** | **Class** | **Species** | **Variant name** | **Accession** **no.** |
| MHC class IIB  | Reptilia | *Crocodylus porosus* (saltwater crocodile) | *Crpo-DB01* | GU126912 |
| exon 3 |  |  | *Crpo-DB04* | GU126915 |
| [2] |  |  | *Crpo-DB08* | GU126919 |
|  |  | *Crocodylus niloticus* (Nile crocodile)  | *Crni-DB02* | GU126822 |
|  |  |  | *Crni-DB03* | GU126823 |
|  |  |  | *Crni-DB05* | GU126825 |
|  |  | *Crocodylus intermedius* (Orinoco crocodile)  | *Crin-DB01* | GU126890 |
|  |  |  | *Crin-DB04* | GU126893 |
|  |  |  | *Crin-DB06* | GU126895 |
|  |  | *Crocodylus acutus* (American crocodile)  | *Crac-DB01* | GU126827 |
|  |  |  | *Crac-DB02* | GU126828 |
|  |  |  | *Crac-DB03* | GU126829 |
|  |  |  | *Crac-DB06* | GU126832 |
|  |  | *Crocodylus palustris* (mugger crocodile)  | *Crpa-DB01* | GU126833 |
|  |  |  | *Crpa-DB03* | GU126835 |
|  |  | *Crocodylus siamensis* (Siamese crocodile)  | *Crsi-DB02* | GU126846 |
|  |  |  | *Crsi-DB03* | GU126847 |
|  |  | *Crocodylus rhombifer* (Cuban crocodile)  | *Crrh-DB01* | GU126896 |
|  |  |  | *Crrh-DB05* | GU126900 |
|  |  | *Crocodylus jonsoni* (freshwater crocodile) | *Crjo-DB01* | GU126804 |
|  |  |  | *Crjo-DB02* | GU126805 |
|  |  |  | *Crjo-DB03* | GU126806 |
|  |  |  | *Crjo-DB04* | GU126807 |
|  |  | *Crocodylus novaeguineae* (New Guinea  | *Crno-DB01* | GU126909 |
|  |  | crocodile) | *Crno-DB03* | GU126911 |
|  |  | *Crocodylus moreletii* (Morelet's crocodile)  | *Crmo-DB02* | GU126921 |
|  |  |  | *Crmo-DB04* | GU126923 |
|  |  | *Crocodylus mindorensis* (Philippine crocodile) | *Crmi-DB02* | GU126810 |
|  |  |  | *Crmi-DB03* | GU126811 |
|  |  | *Osteolaemus tetraspis* (Dwarf crocodile)  | *Oste-DB01* | GU126836 |
|  |  |  | *Oste-DB05* | GU126840 |
|  |  |  | *Oste-DB06* | GU126841 |
|  |  | *Mecistops cataphractus* (African slender- snouted | *Meca-DB01* | GU126849 |
|  |  | crocodile) | *Meca-DB03* | GU126851 |
|  |  |  | *Meca-DB07* | GU126855 |
|  |  | *Paleosuchus palpebrosus* (Cuvier's dwarf caiman)  | *Papa-DB02* | GU126858 |
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| (Cont.) |  |  |  |  |
|  |  |  |  |  |
| **Dataset** | **Class** | **Species** | **Variant name** | **Accession** **no.** |
| MHC class IIB  |  | *Alligator mississippiensis* (American alligator) | *Almi-DB01* | GU126813 |
| exon 3 |  |  | *Almi-DB03* | GU126815 |
| [2] |  |  | *Almi-DB04* | GU126816 |
|  |  |  | *Almi-DB05* | GU126817 |
|  |  | *Alligator sinensis* (Chinese alligator) | *Alsi-DB01* | GU126880 |
|  |  |  | *Alsi-DB04* | GU126883 |
|  |  | *Caiman yacare* (Yacare caiman)  | *Caya-DB01* | GU126903 |
|  |  |  | *Caya-DB02* | GU126904 |
|  |  |  | *Caya-DB03* | GU126905 |
|  |  |  | *Caya-DB05* | GU126907 |
|  |  | *Caiman crocodylus* (spectacled caiman) | *Cacr-DB02* | GU126865 |
|  |  |  | *Cacr-DB04* | GU126867 |
|  |  | *Caiman latirostris* (broad-snouted caiman) | *Cala-DB01* | GU126871 |
|  |  |  | *Cala-DB03* | GU126873 |
|  |  |  | *Cala-DB07* | GU126877 |
|  |  | *Melanosuchus niger* (black caiman) | *Meni-DB03* | GU126888 |
|  |  | *Sphenodon punctatus* (tuatara ) | *Sppu-DAB\*03* | DQ124235 |
|  |  |  | *Sppu-DAB\*05* | DQ124237 |
|  |  |  | *Sppu-DAB\*06* | DQ124238 |
|  | Aves | *Gallus gallus* (chicken) | *BLB1* | AL023516 |
|  |  |  | *BLB2* |  |
|  |  | *Coturnix japonica* (quail) | *Coja-DAB1* | AB078884 |
|  |  |  | *Coja-DBB1* |  |
|  |  |  | *Coja-DCB1* |  |
|  |  |  | *Coja-DDB1* |  |
|  |  |  | *Coja-DEB1* |  |
|  |  |  | *Coja-DFB1* |  |
|  |  |  | *Coja-DGB1* |  |
|  |  | *Phasianus colchicus* (pheasant) | *Phco-DAB1* | AJ224349 |
|  |  |  | *Phco-DAB2* | AJ224348 |
|  | Osteichthyes (outgroup) | *Oncorhynchus mykiss* (rainbow trout) | *Onmy-DAB* | OMU20944 |

**References**

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2. Jaratlerdsiri W, Isberg SR, Higgins DP, Miles LG, Gongora J (2014) Selection and trans-species polymorphism of Major Histocompatibility Complex class II genes in the Order Crocodylia. PLOS ONE 9: e87534.