Spiny Dogfish:

>sp|Q9ZZ52|COX1\_SQUAC Cytochrome c oxidase subunit 1 OS=Squalus acanthias GN=MT-CO1 PE=3 SV=1  
MAINRWFFSTNHKDIGTLYLIFGAWAGMVGTALSLLIRAELSQPGTLLGDDQIYNVIVTA  
HAFVMIFFMVMPVMIGGFGNWLVPLMIGAPDMAFPRMNNMSFWLLPPSLLLLLASAGVEA  
GAGTGWTVYPPLAGNMAHAGASVDLAIFSLHLAGISSILASINFITTIINMKPPAISQYQ  
TPLFVWSILVTTILLLLSLPVLAAAITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMISHVVAYYSGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGSIKWETPLLWALGFIFLFTVGGLTGIVLAN  
SSLDIVLHDTYYVVAHFHYVLSMGAVFAIMAGFIHWFPLFSGYTLHSTWTKTQFLVMFIG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYALWNTVSSIGSLISLVAVIMFLFIIWEAFAPSG  
KVLSVELPHTNVEWLHGCPPPYHTYEEPAFVQVQRTYF

Sea Lamprey

>sp|Q35536|COX1\_PETMA Cytochrome c oxidase subunit 1 OS=Petromyzon marinus GN=MT-CO1 PE=3 SV=1  
MTHIRWLFSTNHKDIGTLYLIFGAWAGMVGTALSILIRAELSQPGTLLGDDQIFNVIVTA  
HAFVMIFFMVMPIMIGGFGNWLVPLMLGAPDMAFPRMNNMSFWLLPPSLLLLLASAGVEA  
GAGTGWTVYPPLAGNLAHTGASVDLTIFSLHLAGVSSILGAVNFITTIFNMKPPTMTQYQ  
TPLFVWSVLITAVLLLLSLPVLAAAITMLLTDRNLNTSFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGIISHVVAYYAGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGKIVWHTPMLWALGFIFLFTVGGLTGIVLSN  
SSLDIILHDTYYVVAHFHYVLSMGAVFAIMAGFVHWFPLFTGYTLNETWAKAHFIIMFAG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTTWNIISSIGSTVSLIAVMLFMFILWEAFSAKR  
KAIATDLLNTNLEWLHGCPPPYHTYEEPAFVQTNFKK

Saddled Bichir:

>tr|F2W4F6|F2W4F6\_9ACTI Cytochrome c oxidase subunit 1 OS=Polypterus endlicherii congicus GN=COX1 PE=3 SV=1  
MTITRWLFSTNHKDIGTLYLIFGAWAGMVGTALSLLIRAELGQPGALMGDDQIYNVIVTA  
HAFVMIFFMVMPIMIGGFGNWLVPLMIGAPDMAFPRMNNMSFWLLPPSLLLLLTSSAVEA  
GVGTGWTVYPPLAGNLAHAGASVDLAIFSLHLAGVSSILGAINFITTIINMKSPSTSQYQ  
TPLFVWSVLVTAILLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMISHIVAYYSGKNEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGAIKWETPMLWALGFIFLFTVGGLTGIILAN  
SSLDIMLHDTYYVVAHFHYVLSMGAVFAIMGGFVHWFPLFSGYTLHPTWTKIHFGIMFIG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTLWNSLSSIGSMISLTAVIMFLFILWEAFAAKR  
EVQMVNLTYTNVEWLHGCPPPYHTYEEPAFVQSPQARE

Paddlefish:

>tr|Q8HMQ8|Q8HMQ8\_POLSP Cytochrome c oxidase subunit 1 OS=Polyodon spathula GN=COI PE=3 SV=1  
MAITRWFFSTNHKDIGTLYLVFGAWAGMVGTALSLLIRAELSQPGALLGDDQIYNVIVTA  
HAFVMIFFMVMPIMIGGFGNWLVPLMIGAPDMAFPRMNNMSFWLLPPSFLLLLASSGVEA  
GAGTGWTVYPPLAGNLAHAGASVDLTIFSLHLAGVSSILGAINFITTIINMKPPAVFQYQ  
TPLFVWSVLVTAVLLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMISHIVAYYAGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGSIKWDTPLLWALGFIFLFTVGGLTGIVLAN  
SSLDIVLHDTYYVVAHFHYVLSMGAVFAIMGAFVHWFPLFTGYTLHSTWSKIHFAVMFVG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYALWNTVSSVGSLISLIAVIMFLFILWEAFAAKR  
EVLSVELTATNVEWLHGCPPPYHTYEEPAFVQVQSTN

Ghost Shark:

>tr|D7RWS9|D7RWS9\_CALMI Cytochrome c oxidase subunit 1 OS=Callorhinchus milii GN=COX1 PE=3 SV=1  
MTINRWLFSTNHKDIGTLYLLFGAWAGMVGTALSLLIRAELSQPGALMGDDQIYNVIVTA  
HAFVMIFFMVMPIMIGGFGNWLIPLMIGAPDMAFPRMNNMSFWLLPPSFLLLLASAGVEA  
GAGTGWTVYPPLAGNLAHAGASVDLTIFSLHLAGISSILASINFITTIINMKPPSITQYQ  
TPLFVWSILITTILLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMISHVVTYYSGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGNIKWDTPMLWALGFIFLFTVGGLTGIVLAN  
SSLDIVLHDTYYVVAHFHYVLSMGAVFAIMAGLVHWFPLFTGYTLHETWTKIHFGLMFIG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTLWNSVSSIGSLMSLLAVILFLFILWEAFASKR  
TLSHVMMSSTNNEWLHGCPPPHHTFEEPAFVQIQVNKKG

Coelacanth:

>sp|O03167|COX1\_LATCH Cytochrome c oxidase subunit 1 OS=Latimeria chalumnae GN=MT-CO1 PE=3 SV=1  
MMITRWLFSTNHKDIGTLYMIFGAWAGMVGTALSLLIRAELSQPGALLGDDQIYNVVVTA  
HAFVMIFFMVMPIMIGGFGNWLIPLMIGAPDMAFPRMNNMSFWLLPPSLLLLLASSGVEA  
GAGTGWTVYPPLAGNLAHAGASVDLTIFSLHLAGVSSILGAINFITTVINMKPPTMTQYQ  
TPLFIWSVLVTAVLLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMISHIVAYYSGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGVTKWDTPLLWALGFIFLFTVGGLTGIVLAN  
SSLDIILHDTYYVVAHFHYVLSMGAVFAIMGGLVHWFPLMTGYTLHNTWTKIHFGVMFTG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTLWNTVSSIGSLISLIAVIMFMFILWEAFSAKR  
EVLIVEMTTTNVEWLHGCPPPHHTYEEPAFVQAPR

Bowfin:

>tr|Q8HQL9|Q8HQL9\_AMICA Cytochrome c oxidase subunit 1 OS=Amia calva GN=COI PE=3 SV=1  
MTITRWFFSTNHKDIGTLYLVFGAWAGMVGTALSLLIRAELSQPGALLGDDQIYNVIVTA  
HAFVMIFFMVMPVMIGGFGNWLVPLMIGAPDMAFPRMNNMSFWLLPPSFLLLLASSGVEA  
GAGTGWTVYPPLASNLAHAGASVDLTIFSLHLAGVSSILGAINFITTIINMKPPAASQYQ  
TPLFVWSVLITAVLLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMVSHIVAYYAGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMVIAIPTGVKVFSWLATLHGGAIKWETPLLWALGFIFLFTVGGLTGIVLAN  
SSLDIVLHDTYYVVAHFHYVLSMGAVFAIMGGFVHWFPLFSGYTLHPTWSKIHFGVMFVG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTLWNTVSSIGSLVSLIAVVMFLFMLWEAFAAKR  
EVLAVEYAATNVEWLHGCPPPYHTYEEPAYVQAHRA

Pollen`s Cichlid:

>tr|B5DCF6|B5DCF6\_9CICH Cytochrome c oxidase subunit 1 OS=Paratilapia polleni GN=CO1 PE=3 SV=1  
MAITRWFFSTNHKDIGTLYLVFGAWAGMVGTALSLLIRAELSQPGSLLGDDQIYNVIVTA  
HAFVMIFFMVMPIMIGGFGNWLIPLMIGAPDMAFPRMNNMSFWLLPPSFLLLLASSGVEA  
GAGTGWTVYPPLAGNLAHAGPSVDLTIFSLHLAGVSSILGAINFITTIINMKPPAISQYQ  
TPLFVWSVLITAVLLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMISHIVAYYSGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGAIKWDTPLLWALGFIFLFTVGGLTGIVLAN  
SSLDIMLHDTYYVVAHFHYVLSMGAVFAIVGGFVHWFPLFSGYTLHSTWTKIHFGVMFIG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTLWNTVSSIGSMISLVAVIMFLFIIWEAFAAKR  
EVLSAELTTTNAEWLHGCPPPYHTFEEPAFVQVQQA

Ropefish:

>tr|Q8HMU1|Q8HMU1\_ERPCA Cytochrome c oxidase subunit 1 OS=Erpetoichthys calabaricus GN=COI PE=3 SV=1  
MTITRWLFSTNHKDIGTLYLIFGAWAGMVGTALSLLIRAELGQPGALMGDDQIYNVIVTA  
HAFVMIFFMVMPIMIGGFGNWLVPLMIGAPDMAFPRMNNMSFWLLPPSFLLLLTSSAVEA  
GVGTGWTVYPPLAGNLAHAGASVDLAIFSLHLAGVSSILGAINFITTIINMKPPATSQYQ  
TPLFVWSVLVTAVLLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMISHIVAYYSGKNEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGAIKWETPMLWALGFIFLFTVGGLTGIILAN  
SSLDIMLHDTYYVVAHFHYVLSMGAVFAIMGGFVHWFPLFSGYTLHPTWTKIHFGVMFIG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTLWNSLSSIGSMISLTAVIMFLFILWEAFAAKR  
EVQTVNLTYTNVEWLHGCPPPYHTYEEPAFVQSPNSRE

Great White Shark:

>tr|I1U3D7|I1U3D7\_CARCH Cytochrome c oxidase subunit 1 OS=Carcharodon carcharias PE=3 SV=1  
MAINRWLFSTNHKDIGTLYLIFGAWAGMVGTALSLLIRAELGQPGSLLGDDQIYNVIVTA  
HAFVMIFFMVMPIMIGGFGNWLVPLMIGAPDMAFPRMNNMSFWLLPPSFLLLLASAGVEA  
GAGTGWTVYPPLASNLAHAGPSVDLAIFSLHLAGISSILASINFITTIINMKPPAISQYQ  
TPLFVWSILVTTILLLPALPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMISHVVAYYSGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGTIKWDTPLLWALGFIFLFTVGGLTGIVLAN  
SSLDIVLHDTYYVVAHFHYVLSMGAVFAIMAGFIHWFPLMSGFTLHQTWTKIQFTVMFIG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTLWNAISSIGSLISLVAVIMLLFIIWEAFASKR  
EVLSIELPHTNVEWLHGCPPPYHTYEEPAFVQIQRPSF

Axolotl:

>tr|Q70EE6|Q70EE6\_AMBME Cytochrome c oxidase subunit 1 OS=Ambystoma mexicanum GN=COI PE=3 SV=1  
MMITRWLFSTNHKDIGTLYLVFGAWAGMVGTALSLLIRAELSQPGALLGDDQIYNVIVTA  
HAFVMIFFMVMPVMIGGFGNWLVPLMIGAPDMAFPRMNNMSFWLLPPSFLLLLASSGVEA  
GAGTGWTVYPPLAGNLAHAGASVDLTIFSLHLAGVSSILGAINFITTSINMKPASMSQYQ  
TPLFVWSVLITAVLLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPVLYQHLFWFFGH  
PEVYILILPGFGMISHIVTYYSAKKEPFGYMGMVWAMMSIGLLGFIVWAHHMFTVDLNVD  
TRAYFTSATMIIAIPTGVKVFSWLATMHGGAIKWDAAMLWALGFIFLFTVGGLTGIVLAN  
SSLDIVLHDTYYVVAHFHYVLSMGAVFAIMGGFVHWFPLFSGYTLHSTWSKIHFGVMFIG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTLWNTVSSIGSLISLVAVIMMMFIIWEAFASKR  
EVLSTELTSTNIEWLHNCPPPYHTFEEPSFVQSRI

Cuvier's Bichir:

>tr|Q8HMS1|Q8HMS1\_POLSE Cytochrome c oxidase subunit 1 OS=Polypterus senegalus senegalus GN=COI PE=3 SV=1  
MTITRWLFSTNHKDIGTLYLIFGAWAGMVGTALSLLIRAELGQPGALMGDDQIYNVIVTA  
HAFVMIFFMVMPIMIGGFGNWLVPLMIGAPDMAFPRMNNMSFWLLPPSLLLLLTSSAVEA  
GVGTGWTVYPPLAGNLAHAGASVDLAIFSLHLAGVSSILGAINFITTIINMKPPSTSQYQ  
TPLFVWSVLITAVLLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMISHIVAYYSGKNEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGAIKWETPMLWALGFIFLFTVGGLTGIILAN  
SSLDIMLHDTYYVVAHFHYVLSMGAVFAIMGGFVHWFPLFSGYTLHSTWTKIHFGVMFIG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTLWNSLSSIGSMISLTAVIMFLFILWEAFAAKR  
EVQTVELTYTNVEWLHGCPPPYHTYEEPAFVQSPQARE

Russian Sturgeon:

>tr|C1J916|C1J916\_ACIGU Cytochrome c oxidase subunit 1 OS=Acipenser gueldenstaedtii GN=cox1 PE=3 SV=1  
MAITRWFFSTNHKDIGTLYLVFGAWAGMVGTALSLLIRAELSQPGALLGDDQIYNVIVTA  
HAFVMIFFMVMPIMIGGFGNWLVPLMIGAPDMAFPRMNNMSFWLLPPSFLLLLASSGVEA  
GAGTGWTVYPPLAGNLAHAGASVDLTIFSLHLAGVSSILGAINFITTIINMKPPAVSQYQ  
TPLFVWSVLITAVLLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGMISHIVAYYAGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGSIKWDTPLLWALGFIFLFTVGGLTGIVLAN  
SSLDIVLHDTYYVVAHFHYVLSMGAVFAIMGAFVHWFPLFTGYTLHGTWSKIHFAVMFVG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYALWNTVSSIGSLISLVAVIMFLFILWEAFAAKR  
EVMSVELTTTNVEWLHGCPPPYHTYEEPAFVQVQSTS

Australian Lungfish:

>tr|Q94XJ5|Q94XJ5\_NEOFS Cytochrome c oxidase subunit 1 OS=Neoceratodus forsteri GN=COX1 PE=3 SV=1  
MTITRWFFSTNHKDIGTLYMIFGAWAGMVGTALSLLIRAELSQPGALLGDDQIYNVLVTA  
HAFVMIFFMVMPIMIGGFGNWLIPLMIGAPDMAFPRMNNMSFWLLPPSFLLLLASSGVEA  
GAGTGWTVYPPLAGNLAHAGASVDLTIFSLHLAGVSSILGSINFITTIINMKPPAISQYQ  
TPLFIWSVMITTILLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGYGMISHIVAYYSGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGSIKWETPLLWALGFIFLFTVGGLTGIVLAN  
SSLDIVLHDTYYVVAHFHYVLSMGAVFAIMGGFVHWFPLMTGYTLHNTWTKIHFGVMFIG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYTLWNTVSSIGSLISLVAVIMLLFIIWEAFAAKR  
EVMSIELSPTNVEWLHGCPPPHHTFEEPAFVQVQTSQR

Goldfish:

>sp|O78681|COX1\_CARAU Cytochrome c oxidase subunit 1 OS=Carassius auratus GN=mt-co1 PE=3 SV=1  
MAITRWFFSTNHKDIGTLYLVFGAWAGMVGTALSLLIRAELSQPGSLLGDDQIYNVIVTA  
HAFVMIFFMVMPILIGGFGNWLVPLMIGAPDMAFPRMNNMSFWLLPPSFLLLLASSGVEA  
GAGTGWTVYPPLAGNLAHAGASVDLTIFSLHLAGVSSILGAINFITTTINMKPPAISQYQ  
TPLFVWSVLVTAVLLLLSLPVLAAGITMLLTDRNLNTTFFDPAGGGDPILYQHLFWFFGH  
PEVYILILPGFGIISHVVAYYSGKKEPFGYMGMVWAMMAIGLLGFIVWAHHMFTVGMDVD  
TRAYFTSATMIIAIPTGVKVFSWLATLHGGSIKWETPMLWALGFIFLFTVGGLTGIVLSN  
SSLDIVLHDTYYVVAHFHYVLSMGAVFAIMAAFVHWFPLLTGYTLHSAWTKIHFGVMFIG  
VNLTFFPQHFLGLAGMPRRYSDYPDAYALWNTVSSIGSLISLVAVIMFLFILWEAFAAKR  
EVLSVELTMTNVEWLHGCPPPYHTYEEPAFVQIQSN