

Browsing Human and vertebrates genome

Results : Gene sequence

```
CGGCTCCCGCGGCTGCAGGCGCGCGGCTAGAGTGCCCTGGCGGGCTCCGGCTTCCGCGTCCGCCCCGGCCC
CGGTCCAGACTTAGTCTTCAGCTCCGCGCCCGCTCCGCCGCGGCCACCGCGCCCGCGGCGAGCCGAGCC
CCCAGCGACGCCCCGACAGCTCCGGGTGCCAGACAGGGGGCCATGCCGTGCCGGAGGGAGGAGGAAGAG
GAAGCCGGCGAGGAGGCGGAGGGGGAGGAAGAGGAGGAGGACAGCTTCCTCCTACTGCAGCAGTCAGTGG
CGCTGGGCAGCTCGGGCGAGGTGGACCGGCTGGTGGCCCAGATCGGCGAGACGCTGCAGCTGGACGCGGC
GCAGCACAGCCCGGCTCGCCGTGCGGGCCCCCGGGGGCGCCGCTGCGGGCCCCGGGGCCCCCTGGCTGC
GGCGGTGCCGGCGGACAAGGCCAGGTCCCCGGCGGTGCCGCTGCTGCTGCCGCCCGCGTTGGCGGAGACT
GTGGGCCCCGGCGCCCCCTGGGGTCTCGCGTGCGCCCTGGGGGACCGCGGCCCGCTGCGGGGCCGCGCTG
CGCCCTACTGCGTGGCCGAGCTCGCCACAGGCCCCAGCGCGCTGTCCCACTGCCCCCTCAGGCCGACCTT
GATGGGCCTCCGGGAGCTGGCAAGCAGGGCATCCCGCAGCCGCTGTGCGGTCCGTGCCGGCGAGGATGGCT
CCGGGGCGCGCCGCTCCCGCCGCTGCAGCAGCGACGCGGTCCCAACCAGAAACCCGCACAGGCGAC
GACGACCCGACCGGCTTCTGCAGCAGCTAGTGCTCTCTGAAACCTCATCAAGGAGGCCGTGCGAAGGCT
TCATTGCGGACGGGTGCAGTTACGTGCAAAGCTTCCCCAACGCCCCGCTCCTGGGACCTCTGTGCGCCCCG
TGCATGAACCCCTTCGCCTCGCAGCCCTCGCGCGGCTGCAGTGACCCTGGCGCCTCCGGGAGGGCGCAG
CTCAGAACTGGCGACGCGTTCTTGCTGCTGGCAGCTAACACGCCCCGGGTGGCCACAGCGCCAGCCTCAG
ACTGGAGGGCAAGGGTTCCCTTGAGGGCTGCAGTTCTACTCAGGCTGGTGGAGAACTCTGGCTTTTGAA
GCGAGAGTAAAAAGCTAATGACGAGGAACCGAAAAATCGCGAGTGTTTCGCGGGTAACTGGGGTTGAGGGC
CAAAATATTTGGAATGAAGACTTTGGCCCTATTTAAGGCAGATTTTACAGAGCGCACCTCAAACGTACAAGT
CAGTAGGACTCCTTATTTGGCGTGACCCGACCTGGCCGCGGAGCCTGCATTTCTCGCAGCCTCTCAGTGCC
CTCCAGCCCCGCGACCATGTGGCCACAATCCACGCTTCTCCGATCGCGGTGCGCCGAACACGGAGGAT
```

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Browsing Human and vertebrates genome

Results : Error

Gene URJC1 not found

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Browsing Human and vertebrates genome

Results : Gene sequence

```
CTCACTTCCCTCAACCCCTCCACAACTGGGAGGAAACTGAGACCTCCTGGTCACCCGCCGCCGGGCCTT
TTAGAAACTCCCACAAGCTCTGCCTTCCCTCCCTGGTCCTCTTCAGACCCCTCTTAGTTCTTCGCGGCTAAC
GGTAAGCTCTCTCCTTACCTCTCCCTAATCGGCCCTCTGGAGAGGAAAGAAAACCTTAAGAGTCGGGTCCG
GCTAGCCTCCAGCAGCCGCCGCGCCACCGACTGCTCCGCCCTTCTCCTCCCCCTCCTCCAGGCTCGCGC
TCGGGGCCGGGTGTGGAGCTGGAACAGAGGGCTGGCAAGGCGCGCATGCGCACCGAGGGTGGAGCCGCTG
AGCACAGAACCGGAACTTAGAGACAAAGTTCGGAGCCCCGCCCGCCGCGCCGCTGAGTTGTCTGGC
CCCGCCGACCCACGGCCACGACCCACCGACCCACGAATCGGCCCGGCCGTGCGGTGCACCATGTCTGGCT
CCTCCAGCGTCGCCGCTATGAAGAAAGTGGTTCAACAGCTCCGGCTGGAGGCCGGACTCAACCGCGTAAAA
GTGAGCGGGGGCGGGCGGCCGAGGCGGGAGGAAGGCGGCGGCGGGTGGGATCCGGCGGCCAGCTG
GCGGGGGCGGGCGGGACACGCGCCGGCCCTCGCTTCCCTGGAGAGGACGCGCGCTCAGCGGCGGCGATC
GGGGAGCGGCCAGCTTAGAGCAGGCGCCGCTGGGTCTACGCTGTGTTTTAGGGGGACGATTAGTTCCGC
CTTCGCCCCAGGACTTTCGAGGCGGGCTGGCCCTGGGTTGAACCGTGGCCGACATTCCGGTCCTCCTC
CGTCTCTACCTCCCTTGGCAGCCTTCTCGGCTGGTCTACCAACAGCTGCGCCTCCGCGCGCTGTCCGCACC
CTTCCTTCCCACTTGGCAGCCTCCTGTTCTCATCGGACAGGGTATTTCCGACTTTTGATTGAGAGCAGA
CTTTTCTCCCATTTGATCTTCCCAAACCTACTTCCTTTAGTATTAAATTCTTACCTCAACTTCTCTGTCCG
TTGAACACATACTTTAAGCGAATTATTGCATAACTTAACTGTGGATTGAATAAGCATTTTTCGAAACGATCC
TGGAGTGTAAGTTCCGGTCAGTGCCCGTACAACCTCGAACAAGCGTGCAATTCATACCTATGGCACAGT
TTGCTCATATTTGACCTTGGGGATATCGACTGGTCCGCATGCCGGAGAAAATGATTATTGTGGTAATTATTG
GTCTTATTTGGCGTCTGGTTAGTATTGGCCTTGCTTGGGGTACTTTGGGAGAAAAAGCCTTTTGTCTGTGT
TGATAGAATAACTTGACATTCAAGTGCTGTTCTAAGTATTTCTGATTTTACAGTCCTAAATGGATTGGCTTC
```

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Browsing Human and vertebrates genome

Results : Gene information

Gene id: ENSG00000174021

Length: 8257

Start: 84498325

End: 84506581

Chromosome: 1

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Browsing Human and vertebrates genome

Results : Error

Gene URJC1 not found

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Browsing Human and vertebrates genome

Results : Error

Gene URJC11 not found

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Browsing Human and vertebrates genome

Results : Gene information

Gene id: ENSG00000165879

Length: 2645

Start: 97319271

End: 97321915

Chromosome: 10

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Browsing Human and vertebrates genome

Results : Sequence information

```
CGGCTCCCGCGGCTGCAGGCGCGCGGCTAGAGTGCCTGGCGGGCTCCGGCTTCCGCGTCCGCCCCGGCCC
CGGTCCAGACTTAGTCTTCAGCTCCGCGCCCGCTCCGCGCGCGGCCACCGCGCCCGCGGGCAGCCGAGCC
CCCAGCGACGCCCGCACAGCTCCGGGTGCCAGACAGGGGGCCATGCCGTGCCGGAGGGAGGAGGAAGAG
GAAGCCGGCGAGGAGGCGAGGGGGAGGAAGAGAGGAGGACAGCTTCTCTACTGCAGCAGTCAGTGG
CGCTGGGCAGCTCGGGCGAGGTGGACCGGCTGGTGGCCAGATCGGCGAGACGCTGCAGCTGGACGCGGC
GCAGCACAGCCCGGCTCGCGTGGCGGGCCCCGGGGGCGCCGCTGCGGGCCCCGGGGCCCTGGCTGC
GGCGGTGCCGCGGACAAGGCCAGGTCCCCGGCGGTGCCGCTGCTGCTGCCGCCCGCGTTGGCGGAGACT
GTGGGCCCGGCGCCCCCTGGGGTCTCGCTGCGCCCTGGGGGACCGCGGCCCGCTGCGGGGCGCGCTG
CGCCCTACTGCGTGGCCGAGCTCGCCACAGGCCCCAGCGCGCTGTCCCACTGCCCCCTCAGGCCGACCTT
GATGGGCCCTCCGGGAGCTGGCAAGCAGGGCATCCCGCAGCCGCTGTCGGGTCCGTGCCGGCGAGGATGGCT
CCGGGGCGCCCGCCTCCCGCCGCTGCAGCAGCGACGCGGGTCCCAACCAGAAACCGCACAGGCGAC
GACGACCCGCACCGGCTTCTGCAGCAGCTAGTGCTCTCTGGAAACCTCATCAAGGAGGCCGTGCGAAGGCT
TCATTGCGGACGGGTGCAGTTACGTGCAAAGCTTCCCCAACGCCCGCTCCTGGGACCTCTGTGCGCCCCGG
TGCATGAACCCCTTCGCCTCGCAGCCCTCGCGCGGCTGCAGTGACCCTGGCGCCTCCGGGAGGGCGCAG
CTCAGAACTGGCGACGGCGTTCTTGCTGCTGGCAGCTAACACGCCCGGGGTGGCCACAGCGCCAGCCTCAG
ACTGGAGGGCAAGGGTTCCCTTGAGGGCTGCAGTTCTACTCAGGCTGGTGGAGAACTCTGGCTTTTGAA
GCGAGAGTAAAAAGCTAATGACGAGGAACCGAAAAATCGCGAGTGTTCGCGGGTAACTGGGGTTGAGGGC
CAAAATATTGGGAATGAAGGACTTTGGCCCTATTTAAGGCAGATTTACAGAGCGCACCTCAAACGTACAAGT
CAGTAGGACTCCTATTGGCGTGACCCGACCTGGCCGCGGAGCCTGCATTTCTCGCAGCCTCTCAGTGCC
CTCCAGCCCCGCGACCATGTGCCACAATCCACGCTTCTCCGATCGCGGTGCGCCGGAACACGGAGGAT
```

Total length: 2645
A: 477 (18.03%)
C: 799 (30.21%)
T: 520 (19.66%)
G: 849 (32.1%)

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Browsing Human and vertebrates genome

Results : Sequence information

```
CTCACTTCCCTCAACCCTTCCACAACTGGGAGGAAAAGTGAAGACCTCCTGGTCACCCGCCGCCGGGCCTT
TTAGAAACTCCCACAAGCTCTGCCTTCCCTCCCTGGTCCTTTCAGACCCCTCTTAGTTCTTCGCGGCTAAC
GGTAAGCTCTCTCCTTACCTCTCCCTAATCGGCCCTCTGGAGAGGAAAAGAACTTAAGATCGGGTCGC
GCTAGCCTCCAGCAGCCGCCGCCGCCACCGACTGCTCCGCCCTTCTCCTCCCCCTCCTCCAGGCTCGCGC
TCGGGGCCGGGTGTGGAGCTGGAACAGAGGGCTGGCAAGGCCGCATGCGCACCGAGGGTGGAGCCGCTG
AGCACAGAACCGGAACTTAGAGACAAAGTTTCGGAGCCCCGCCCGCCGCGCGCGCTGAGTTGTCTGGC
CCCGCCGACCCACGGCCACGACCCACCGACCCACGAATCGGCCCGGCCGTGCGGTGCACCATGTCTGGCT
CCTCCAGCGTCGCCGCTATGAAGAAAGTGGTTCAACAGCTCCGGCTGGAGGCCGGAATCAACCGCGTAAAA
GTGAGCGGGGGCGGGCGGCCGAGGCGGGAGGAAGCGGGCGGGCGGGTGGGATCCGCGGGCCAGCTG
GCGGGGGCGGGCGGGACACGCGCCGCCCTCGCTTCCCTGGAGAGGACGCGCGCTCAGCGCGGGCGATC
GGGAGCGGCCAGCTTTAGAGCAGGCGCCGCGTGGGTCTACGCTGTGTTTTAGGGGGACGATTAGTTCGCC
CTTCCGCCCCAGGACTTTCCGAGGCGGGCTGGCCCTGGGTTGAACCGTGCCGACATTCCGGTCCTCCTC
CGTCTCTACCTCCCTTGGCAGCCTTCTCGGCTGGTCTCACCAACAGCTGCGCCTCCGCGCGCTGTCCGCACC
CTTCCTTTCCCACTTTGCCAGCCTCCTGTTTCTCATCGGACAGGGTATTTTCCGACTTTTGATTGAGAGCAGA
CTTTTCTCCCATTTGATCTTTCCCAAACCTACTTCTTTAGTATTAAATTCTTACCTTCAACTTCTCTTGTCG
TTGAACACATACTTTAAGCGAATTATTGCATAACTTAACTGTGGATTGAATAAGCATTTTTCGAAACGATCC
TGGAGTGTAAGTTCGGTCAAGTCCCCGTACAACCTCGAACAAGCGTGCAATTCATACCTATGGCACAGT
TTGCTCATATTTGACCTTGGGGATATCGACTGGTCCGCATGCCGGAGAAAATGATTATTGTGGGTAATTATTG
GTCTTATTTGGCGTCTGGTTAGTATTGGCCTTGCTTGGGGTACTTTGGGAGAAAAAGCCTTTTGTCTGTGT
TGATAGAATAACTTGACATTCAAGTGCTGTTCTAAGTATTTCTGATTTTACAGTCCTAAATGGATTGGCTTC
```

Total length: 8257
A: 2279 (27.6%)
C: 1702 (20.61%)
T: 2618 (31.71%)
G: 1658 (20.08%)

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Browsing Human and vertebrates genome

Results : Gene list

DDX11L1

WASH7P

MIR6859-1

MIR1302-2HG

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Browsing Human and vertebrates genome

Results : Gene list

MIR1302-2HG

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http://localhost:8080/geneList?chromo=4&start=0&end=30000

Browsing Human and vertebrates genome

Results : Error

Empty response

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Browsing Human and vertebrates genome

Results : List of 286 species

- Pig - Rongchang
- Pika
- African ostrich
- Nile tilapia
- Channel catfish
- West African mud turtle
- Channel bull blenny
- Sooty mangabey
- Dolphin
- Naked mole-rat male
- Brown trout
- Eastern brown snake
- Mouse CAST/EiJ
- Spiny chromis
- Gorilla
- Silver-eye
- Sloth
- Eurasian sparrowhawk
- Mouse AKR/J
- Sailfin molly
- Greater bamboo lemur
- Mangrove rivulus
- Platypus
- Live sharksucker
- Megabat
- Mouse NOD/ShiLtJ

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Browsing Human and vertebrates genome

Results : List of 10 species

- Pig - Rongchang
- Pika
- African ostrich
- Nile tilapia
- Channel catfish
- West African mud turtle
- Channel bull blenny
- Sooty mangabey
- Dolphin
- Naked mole-rat male

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Browsing Human and vertebrates genome

Results : List of 100 species

- Mainland tiger snake
- Chilean tinamou
- Red fox
- Sperm whale
- Great spotted kiwi
- Pinecone soldierfish
- Greater bamboo lemur
- Kakapo
- Lamprey
- Gouldian finch
- Electric eel
- Okarito brown kiwi
- Large yellow croaker
- Channel bull blenny
- Mouse NZO/HILtJ
- Zebrafish
- Common carp huanghe
- Mouse A/J
- Pig - Wuzhishan
- Horned golden-line barbel
- Tree Shrew
- Marmoset
- Spotted gar
- Tiger
- Goat
- Central bearded dragon

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Browsing Human and vertebrates genome

Results : Karyotype mouse

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- X
- Y
- MT

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Browsing Human and vertebrates genome

Results : Karyotype human

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- X
- Y
- MT

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Browsing Human and vertebrates genome

Results : Chromosome length

Specie: mouse

Chromosome: 18

Length: 90702639

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Browsing Human and vertebrates genome

Results : Error

Can not find internal name for species 'enrique'

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Browsing Human and vertebrates genome

Results : List of 286 species

- Mainland tiger snake
- Chilean tinamou
- Red fox
- Sperm whale
- Great spotted kiwi
- Pinecone soldierfish
- Greater bamboo lemur
- Kakapo
- Lamprey
- Gouldian finch
- Electric eel
- Okarito brown kiwi
- Large yellow croaker
- Channel bull blenny
- Mouse NZO/HILtJ
- Zebrafish
- Common carp huanghe
- Mouse A/J
- Pig - Wuzhishan
- Horned golden-line barbel
- Tree Shrew
- Marmoset
- Spotted gar
- Tiger
- Goat
- Central bearded dragon

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Browsing Human and vertebrates genome

Results : Karyotype cat

- A1
- A2
- A3
- B1
- B2
- B3
- B4
- C1
- C2
- D1
- D2
- D3
- D4
- E1
- E2
- E3
- F1
- F2
- X
- MT

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Browsing Human and vertebrates genome

Results : Karyotype dog

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26



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Browsing Human and vertebrates genome

Results : Error

Can not find internal name for species 'enrique'

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Browsing Human and vertebrates genome

Results : Chromosome length

Specie: cat

Chromosome: X

Length: 130557009

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{"Gene": {"FRAT1": {"Gene id": "ENSG00000165879", "Sequence":
"CGGCTCCCGCGGCTGCAGGCGCGGGCTAGAGTGCCTGGCGGGCTCCGGCTTCCGCGTCCGCCCCGGCCCCGGTCCAGACTTAGTCTTCAGCTCCGCGCCCGCTCCGCCGCGGCCACC
GCGCCCGCCGGCAGCCGAGCCCC
<http://localhost:8080/geneSeq?gene=FRAT1&json=1>

```
{"Error": "Gene URJC1 not found"}
```

```
http://localhost:8080/geneSeq?gene=URJC1&json=1
```

{"Gene": {"GNG5": {"Gene id": "ENSG00000174021", "Sequence":
"CTCACTTCCCTCAACCCTTCCCACAACTGGGAGGAAACTGAGACCTCCTGGTCACCCGCCGCCGGGCCTTTTAGAAACTCCCACAAGCTCTGCCTTCCCTCCCTGGTCCTTTCAGACCCCTCTTAGTTCTTCGCGGCTAAC
<http://localhost:8080/geneSeq?gene=GNG5&json=1>

```
{"Gene": {"GNG5": {"Gene id": "ENSG00000174021", "Chromosome": "1", "Start": 84498325, "End": 84506581}}}
```

<http://localhost:8080/geneInfo?gene=GNG5&json=1>

```
{"Error": "Gene URJC1 not found"}
```

```
http://localhost:8080/geneInfo?gene=URJC1&json=1
```

```
{"Error": "Gene URJC11 not found"}
```

```
http://localhost:8080/geneCalc?gene=URJC11&json=1
```



```
{"Gene": {"FRAT1": {"Gene id": "ENSG00000165879", "Chromosome": "10", "Start": 97319271, "End": 97321915}}}
```

<http://localhost:8080/geneInfo?gene=FRAT1&json=1>

```
{"Gene": {"FRAT1": {"Gene id": "ENSG00000165879", "Length": 2645, "Bases": {"A": {"Count": 477, "Fraction": "18.03%"}, "C": {"Count": 799, "Fraction": "30.21%"}, "T": {"Count": 520, "Fraction": "19.66%"}, "G": {"Count": 849, "Fraction": "32.1%"}}}}}
```

<http://localhost:8080/geneCalc?gene=FRAT1&json=1>

```
{"Gene": {"GNG5": {"Gene id": "ENSG00000174021", "Length": 8257, "Bases": {"A": {"Count": 2279, "Fraction": "27.6%"}, "C": {"Count": 1702, "Fraction": "20.61%"}, "T": {"Count": 2618, "Fraction": "31.71%"}, "G": {"Count": 1658, "Fraction": "20.08%}}}}}
```

<http://localhost:8080/geneCalc?gene=GNG5&json=1>

```
{"Specie": {"Homo sapiens": {"Chromosome": {"1": {"Region0:30000": ["DDX11L1", "WASH7P", "MIR6859-1", "MIR1302-2HG"]}}}}}
```

<http://localhost:8080/geneList?chromo=1&start=0&end=30000&json=1>

```
{"Specie": {"Homo sapiens": {"Chromosome": {"1": {"Region29990:30000": ["MIR1302-2HG"]}}}}}
```

<http://localhost:8080/geneList?chromo=1&start=29990&end=30000&json=1>

```
{"Error": "Empty response"}
```

```
http://localhost:8080/geneList?chromo=4&start=0&end=30000&json=1
```

```
{"Error": "Choose a valid endpoint"}
```

```
http://localhost:8080/listSpecies&json=1
```

```
{"Species": {"1": "Pig - Rongchang", "2": "Pika", "3": "African ostrich", "4": "Nile tilapia", "5": "Channel catfish", "6": "West African mud turtle", "7": "Channel bull blenny", "8": "Sooty mangabey", "9": "Dolphin", "10": "Naked mole-rat male"}}
```

<http://localhost:8080/listSpecies?limit=10&json=1>

{"Species": {"1": "Mainland tiger snake", "2": "Chilean tinamou", "3": "Red fox", "4": "Sperm whale", "5": "Great spotted kiwi", "6": "Pinecone soldierfish", "7": "Greater bamboo lemur", "8": "Kakapo", "9": "Lamprey", "10": "Gouldian finch", "11": "Electric eel", "12": "Okarito brown kiwi", "13": "Large yellow croaker", "14": "Channel bull blenny", "15": "Mouse NZO/HILtJ", "16": "Zebrafish", "17": "Common carp huanghe", "18": "Mouse A/J", "19": "Pig - Wuzhishan", "20": "Horned golden-line barbel", "21": "Tree Shrew", "22": "Marmoset", "23": "Spotted gar", "24": "Tiger", "25": "Goat", "26": "Central bearded dragon", "27": "Naked mole-rat female", "28": "American black bear", "29": "Tetraodon", "30": "Meerkat", "31": "Steppe mouse", "32": "Lyretail cichlid", "33": "Mangrove rivulus", "34": "Gorilla", "35": "Sheep", "36": "Bicolor damselfish", "37": "Coelacanth", "38": "Midas cichlid", "39": "Ma's night monkey", "40": "Pachon cavefish", "41": "Common wombat", "42": "Blue-ringed sea krait", "43": "Gilthead seabream", "44": "Indian peafowl", "45": "Pig-tailed macaque", "46": "American beaver", "47": "Pig - Jinhua", "48": "Duck", "49": "Shrew mouse", "50": "Western mosquitofish", "51": "Agassiz's desert tortoise", "52": "Helmeted guineafowl", "53": "Amazon molly", "54": "Chinese hamster CHOK1GS", "55": "Orangutan", "56": "Olive baboon", "57": "Orbiculate cardinalfish", "58": "Zebra mbuna", "59": "Elephant", "60": "American mink", "61": "Guinea Pig", "62": "Platypus", "63": "Capuchin", "64": "Golden-collared manakin", "65": "Three-toed box turtle", "66": "Prairie vole", "67": "Tropical clawed frog", "68": "Common carp", "69": "Blue tilapia", "70": "Flycatcher", "71": "Pig - Bamei", "72": "Spoon-billed sandpiper", "73": "African ostrich", "74": "Periophthalmus magnuspinnatus", "75": "Chinese softshell turtle", "76": "Asiatic black bear", "77": "Reedfish", "78": "Tarsier", "79": "Clown anemonefish", "80": "Huchen", "81": "Horse", "82": "Pig - Landrace", "83": "Chinese hamster PICR", "84": "Mouse", "85": "Mexican tetra", "86": "Lesser hedgehog tenrec", "87": "Jewelled blenny", "88": "Tongue sole", "89": "Mouse 129S1/SvImJ", "90": "Leopard", "91": "Live sharksucker", "92": "Great Tit", "93": "Northern pike", "94": "Yellowtail amberjack", "95": "Ruff", "96": "Alpaca", "97": "Mouse Lemur", "98": "Ugandan red Colobus", "99": "Human", "100": "Mouse BALB/cJ"}}}

<http://localhost:8080/listSpecies?limit=100&json=1>

```
{"Specie": {"mouse": {"Karyotype": ["1", "2", "3", "4", "5", "6", "7", "8", "9", "10", "11", "12", "13", "14", "15", "16", "17", "18", "19", "X", "Y", "MT"]}}}
```

<http://localhost:8080/karyotype?specie=mouse&json=1>

```
{"Specie": {"human": {"Karyotype": ["1", "2", "3", "4", "5", "6", "7", "8", "9", "10", "11", "12", "13", "14", "15", "16", "17", "18", "19", "20", "21", "22", "X", "Y", "MT"]}}}
```

<http://localhost:8080/karyotype?specie=human&json=1>

```
{"Specie": {"mouse": {"Chromosome": {"18": {"Length": 90702639}}}}}
```

```
http://localhost:8080/chromosomeLength?specie=mouse&chromo=18&json=1
```

```
{"Error": "Can not find internal name for species 'enrique'"}
```

```
http://localhost:8080/chromosomeLength?specie=enrique&chromo=X&json=1
```

{ "Species": { "1": "Mainland tiger snake", "2": "Chilean tinamou", "3": "Red fox", "4": "Sperm whale", "5": "Great spotted kiwi", "6": "Pinecone soldierfish", "7": "Greater bamboo lemur", "8": "Kakapo", "9": "Lamprey", "10": "Gouldian finch", "11": "Electric eel", "12": "Okarito brown kiwi", "13": "Large yellow croaker", "14": "Channel bull blenny", "15": "Mouse NZO/HILtJ", "16": "Zebrafish", "17": "Common carp huanghe", "18": "Mouse A/J", "19": "Pig - Wuzhishan", "20": "Horned golden-line barbel", "21": "Tree Shrew", "22": "Marmoset", "23": "Spotted gar", "24": "Tiger", "25": "Goat", "26": "Central bearded dragon", "27": "Naked mole-rat female", "28": "American black bear", "29": "Tetraodon", "30": "Meerkat", "31": "Steppe mouse", "32": "Lyretail cichlid", "33": "Mangrove rivulus", "34": "Gorilla", "35": "Sheep", "36": "Bicolor damselfish", "37": "Coelacanth", "38": "Midas cichlid", "39": "Ma's night monkey", "40": "Pachon cavefish", "41": "Common wombat", "42": "Blue-ringed sea krait", "43": "Gilthead seabream", "44": "Indian peafowl", "45": "Pig-tailed macaque", "46": "American beaver", "47": "Pig - 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<http://localhost:8080/listSpecies?limit=URJC&json=1>

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<http://localhost:8080/karyotype?specie=cat&json=1>


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<http://localhost:8080/karyotype?specie=dog&json=1>

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{"Specie": {"cat": {"Chromosome": {"X": {"Length": 130557009}}}}}
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http://localhost:8080/chromosomeLength?specie=cat&chromo=X&json=1
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