

Browsing Human and vertebrates genome

BASIC Level Services

MEDIUM Level Services

1 - List of species in the genome database

JSON ☐

2 - Information about the karyotype

JSON ☐

3- Chromosome Length

JSON ☐

Browsing Human and vertebrates genome

BASIC Level Services

MEDIUM Level Services

1 - List of species in the genome database

☐ JSON

2 - Information about the karyotype

☐ JSON

3- Chromosome Length

☐ JSON

Browsing Human and vertebrates genome

BASIC Level Services

MEDIUM Level Services

4 - Return the sequence of given human gene

Gene JSON ☐ GO!

5 - Return information about a human gene

Gene JSON ☐ GO!

6 - Gene calculations

Gene JSON ☐ GO!

7 - Find genes

Chromosome
Start
End JSON ☐ GO!

```
{"Error": "JSON not valid in this endpoint \"^\""}

```

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

```

```
{"Error": "JSON not valid in this endpoint \"/1\""}

```

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

```

```
{"Error": "JSON not valid in this endpoint \"/2\""}

```

```
http://localhost:8080/2&json=1

```

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

[BASIC SERVICES](#)

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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

[BASIC SERVICES](#)

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Browsing Human and vertebrates genome

Results : List of 100 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

[BASIC SERVICES](#)

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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

- 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 : Karyotype cat

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

[BASIC SERVICES](#)

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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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[MEDIUM SERVICES](#)

Browsing Human and vertebrates genome

Results : Chromosome length

Specie: cat

Chromosome: X

Length: 130557009

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Browsing Human and vertebrates genome

Results : Gene sequence

```
CGGCTCCCGCGGCTGCAGGCGCGCGGCTAGAGTGCCTGGCGGGCTCCGGCTTCCGCGTCCGCCCCGGCCC
CGGTCCAGACTTAGTCTTCAGCTCCGCGCCCGCTCCGCCGCGGCCACCGCGCCCGCGGCGAGCCGAGCC
CCCAGCGACGCCCCGACAGCTCCGGGTGCCAGACAGGGGGCCATGCCGTGCCGGAGGGAGGAGGAAGAG
GAAGCCGGCGAGGAGGCGGAGGGGGAGGAAGAGGAGGAGGACAGCTTCCTCCTACTGCAGCAGTCAGTGG
CGCTGGGCAGCTCGGGCGAGGTGGACCGGCTGGTGGCCCAGATCGGCGAGACGCTGCAGCTGGACGCGGC
GCAGCACAGCCCGGCTCGCCGTGCGGGCCCCCGGGGGCGCCGCTGCGGGCCCCGGGGCCCCCTGGCTGC
GGCGGTGCCGGCGGACAAGGCCAGGTCCCCGGCGGTGCCGCTGCTGCTGCCGCCCGCGTTGGCGGAGACT
GTGGGCCCCGGCGCCCCCTGGGGTCTCGCTGCGCCCTGGGGGACCGCGGCCCGCTGCGGGGCCGCGCTG
CGCCCTACTGCGTGGCCGAGCTCGCCACAGGCCCCAGCGCGCTGTCCCACTGCCCCCTCAGGCCGACCTT
GATGGGCCTCCGGGAGCTGGCAAGCAGGGCATCCCGCAGCCGCTGTGCGGTCCGTGCCGGCGAGGATGGCT
CCGGGGCGCGCCGCTCCCGCCGCTGCAGCAGCGACGCGGTCCCAACCAGAAACCCGCACAGGCGAC
GACGACCCGCGACCGGCTTCTGCAGCAGCTAGTGTCTCTTGAAACCTCATCAAGGAGGCCGTGCGAAGGCT
TCATTGCGGACGGGTGCAGTTACGTGCAAAGCTTCCCCAACGCCCCGCTCCTGGGACCTCTGTGCGCCCCG
TGCATGAACCCCTTCGCCTCGCAGCCCTCGCGCGGCTGCAGTGACCCTGGCGCCTCCGGGAGGGCGCAG
CTCAGAACTGGCGACGCGTTCTTGTGCTGGCAGCTAACACGCCCCGGGTGGCCACAGCGCCAGCCTCAG
ACTGGAGGGCAAGGGTTCCCTTGAGGGTGCAGTTCTACTCAGGCTGGTGGAGAACTCTGGCTTTTGAA
GCGAGAGTAAAAAGCTAATGACGAGGAACCGAAAAATCGCGAGTGTTCGCGGGTAACTGGGGTTGAGGGC
CAAAATATTTGGAATGAAGACTTTGGCCCTATTTAAGGCAGATTTTACAGAGCGCACCTCAAACGTACAAGT
CAGTAGGACTCCTTATTTGGCGTGACCCGACCTGGCCGCGGAGCCTGCATTTCTCGCAGCCTCTCAGTGCC
CTCCAGCCCCGCGACCATGTGGCCACAATCCACGCTTCTCCGGATCGCGGTGCGCCGGAACACGGAGGAT
```

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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
GGTAAGCTCTCTCCTTACCTCTCCCTAATCGGCCCTCTGGAGAGGAAAGAAAACCTTAAGAGTCGGGTCGC
GCTAGCCTCCAGCAGCCGCCGCGCCACCGACTGCTCCGCCCTTCTCCTCCCCCTCCTCCAGGCTCGCGC
TCGGGGCCGGGTGTGGAGCTGGAACAGAGGGCTGGCAAGGCGCGCATGCGCACCGAGGGTGGAGCCGCTG
AGCACAGAACCGGAACTTAGAGACAAAGTTCGGAGCCCCGCCCGCCGCGCCGCTGAGTTGTCTGGC
CCCGCCGACCCACGGCCACGACCCACCGACCCACGAATCGGCCCGGCCGTGCGGTGCACCATGTCTGGCT
CCTCCAGCGTCGCCGCTATGAAGAAAGTGGTTCAACAGCTCCGGCTGGAGGCCGGACTCAACCGCGTAAAA
GTGAGCGGGGGCGGGCGGCCGAGGCGGGAGGAAGGCGGCGGCGGGTGGGATCCGGCGGCCAGCTG
GCGGGGGCGGGCGGGACACGCGCCGGCCCTCGCTTCCCTGGAGAGGACGCGCGCTCAGCGGCGGCGATC
GGGGAGCGGCCAGCTTAGAGCAGGCGCCGCTGGGTCTACGCTGTGTTTTAGGGGGACGATTAGTTGCC
CTTCGCCCCAGGACTTTCCGAGGCGGGCTGGCCCTGGGTTGAACCGTGGCCGACATTCCGGTCCTCCTC
CGTCTCTACCTCCCTTGGCAGCCTTCTCGGCTGGTCTACCAACAGCTGCGCCTCCGCGCGCTGTCCGCACC
CTTCCTTTCCCACTTTGCCAGCCTCCTGTTCTCATCGGACAGGGTATTTCCGACTTTTGATTGAGAGCAGA
CTTTTCTCCCATTTGATCTTTCCAAACCTACTTCCTTTAGTATTAAATTCTTACCTTCAACTTCTCTGTCCG
TTGAACACATACTTTAAGCGAATTATTGCATAACTTAACTGTGGATTGAATAAGCATTTTTCGAAACGATCC
TGGAGTGTAAGTTCCGGTCAGTGCCCCGTACAACCTCGAACAAGCGTGCAATTCATACCTATGGCACAGT
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

[BASIC SERVICES](#)

[MEDIUM SERVICES](#)

Browsing Human and vertebrates genome

Results : Error

Gene URJC11 not found

[BASIC SERVICES](#)

[MEDIUM SERVICES](#)

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
GCAGCACAGCCCGGCTCGCGTGGGGCCCCGGGGGCGCCGCTGCGGGCCCCGGGGCCCTGGCTGC
GGCGGTGCCGCGGACAAGGCCAGGTCCCCGGCGGTGCCGCTGCTGCTGCCGCCCGCGTTGGCGGAGACT
GTGGGCCCGGCGCCCCCTGGGGTCTCGCTGCGCCTGGGGGACCGCGGCCCGCTGCGGGGCGCGCTG
CGCCCTACTGCGTGGCCGAGCTCGCCACAGGCCCCAGCGCGCTGTCCCACTGCCCCCTCAGGCCGACCTT
GATGGGCCCTCCGGGAGCTGGCAAGCAGGGCATCCCGCAGCCGCTGTCGGGTCCGTGCCGGCGAGGATGGCT
CCGGGGCGCCCGCCTCCCGCCGCTGCAGCAGCGACGCGGGTCCCAACCAGAAACCGCACAGGCGAC
GACGACCCGACCCGGCTTCTGCAGCAGCTAGTGCTCTCTGGAAACCTCATCAAGGAGGCCGTGCGAAGGCT
TCATTGCGGACGGGTGCAGTTACGTGCAAAGCTTCCCCAACGCCCGCTCCTGGGACCTCTGTGCGCCCCGG
TGCATGAACCCCTTCGCCTCGCAGCCCTCGCGCGGCTGCAGTGACCCTGGCGCCTCCGGGAGGGCGCAG
CTCAGAACTGGCGACGGCGTTCTTGCTGCTGGCAGCTAACACGCCCGGGGTGGCCACAGCGCCAGCCTCAG
ACTGGAGGGCAAGGGTTCCCTTGAGGGCTGCAGTTCTACTCAGGCTGGTGGAGAACTCTGGCTTTTGAA
GCGAGAGTAAAAAGCTAATGACGAGGAACCGAAAAATCGCGAGTGTTCGCGGGTAACTGGGGTTGAGGGC
CAAAATATTTGGAATGAAGGACTTTGGCCCTATTTAAGGCAGATTTACAGAGCGCACCTCAAACGTACAAGT
CAGTAGGACTCCTTATTTGGCGTGACCCGACCTGGCCGCGGAGCCTGCATTTCTCGCAGCCTCTCAGTGCC
CTCCAGCCCCGCGACCATGTGGCCACAATCCACGCTTCTCCGATCGCGGTGCGCCGGAACACGGAGGAT
```

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

```
CTCACTTCCCTCAACCCTTCCACAACTGGGAGGAAACTGAGACCTCCTGGTCACCCGCCGCCGGGCCTT
TTAGAAACTCCCACAAGCTCTGCCTTCCCTCCCTGGTCCTTTCAGACCCCCTCTTAGTTCTTCGCGGCTAAC
GGTAAGCTCTCTCCTTACCTCTCCCTAATCGGCCCTCTGGAGAGGAAAAGAAACTTAAGATCGGGTCGC
GCTAGCCTCCAGCAGCCGCCGCCGCCACCGACTGCTCCGCCCTTCTCCTCCCCCTCCTCCAGGCTCGCGC
TCGGGGCCGGGTGTGGAGCTGGAACAGAGGGCTGGCAAGGCCGCATGCGCACCGAGGGTGGAGCCGCTG
AGCACAGAACCGGAACTTAGAGACAAAGTTTCGGAGCCCCGCCCGCCGCGCGCGCTGAGTTGTCTGGC
CCCGCCGACCCACGGCCACGACCCACCGACCCACGAATCGGCCCGGCCGTGCGGTGCACCATGTCTGGCT
CCTCCAGCGTCGCCGCTATGAAGAAAGTGGTTCAACAGCTCCGGCTGGAGGCCGGACTCAACCGCGTAAAA
GTGAGCGGGGGCGGGCGGCCGAGGCGGGAGGAAGCGGGCGGGCGGGTGGGATCCGCGGGCCAGCTG
GCGGGGGCGGGCGGGACACGCGCCGGCCCTCGCTTCCCCTGGAGAGGACGCGCGCTCAGCGCGGGCGATC
GGGGAGCGGCCAGCTTTAGAGCAGGCGCCGCGTGGGTCTACGCTGTGTTTTAGGGGGACGATTAGTTCGCC
CTTCCGCCCAGGACTTTCCGAGGCGGGCTGGCCCTGGGTTGAACCGTGGCCGACATTCCGGTCTCCTC
CGTCTCTACCTCCCTTGGCAGCCTTCTCGGCTGGTCTCACCAACAGCTGCGCCTCCGCGCGCTGTCCGCACC
CTTCCTTTCCCACTTTGCCAGCCTCCTGTTTCTCATCGGACAGGGTATTTTCCGACTTTTGATTGAGAGCAGA
CTTTTCTCCCATTTGATCTTTCCCAAACCTACTTCTTTAGTATTAAATTCTTACCTTCAACTTCTCTTGTCG
TTGAACACATACTTTTAAGCGAATTATTGCATAACTTAACTGTGGATTGAATAAGCATTTTTCGAAACGATCC
TGGAGTGTAAGTTCGGTCACTGCCCCGTACAACCTCGAACAAGCGTGCATTTACATACCTATGGCACAGT
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

[BASIC SERVICES](#)

[MEDIUM SERVICES](#)

Browsing Human and vertebrates genome

Results : Gene list

MIR1302-2HG

[BASIC SERVICES](#)

[MEDIUM SERVICES](#)

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

Browsing Human and vertebrates genome

Results : Error

Empty response

[BASIC SERVICES](#)

[MEDIUM SERVICES](#)

{ "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", "101": "Pig - Rongchang", "102": "Drill", "103": "Burton's mouthbrooder", "104": "Lion", "105": "Burrowing owl", "106": "Hyrax", "107": "Indian glassy fish", "108": "Gelada", "109": "Mouse FVB/NJ", "110": "Budgerigar", "111": "Japanese medaka HNI", "112": "Chacoan peccary", "113": "Pink-footed goose", "114": "Tiger tail seahorse", "115": "Mouse CBA/J", "116": "Turbot", "117": "Opossum", "118": "Greater horseshoe bat", "119": "Paramormyrops kingsleyae", "120": "Blind barbel", "121": "Rufous-capped babbler", "122": "Komodo dragon", "123": "Saccharomyces cerevisiae", "124": "Monterrey platyfish", "125": "Beluga whale", "126": "Painted turtle", "127": "Japanese medaka HSOK", "128": "Mouse NOD/ShiLtJ", "129": "Angola colobus", "130": "Golden Hamster", "131": "Spiny chromis", "132": "Naked mole-rat male", "133": "Makobe Island cichlid", "134": "Dog - Basenji", "135": "Fugu", "136": "Golden pheasant", "137": "Crab-eating macaque", "138": "Koala", "139": "Mouse DBA/2J", "140": "Nile tilapia", "141": "Ring-necked pheasant", "142": "Kangaroo rat", "143": "Megabat", "144": "Caenorhabditis elegans", "145": "Alpine marmot", "146": "Mallard", "147": "Mouse PWK/PhJ", "148": "Hybrid - Bos Indicus", "149": "Mouse C57BL/6NJ", "150": "Round goby", "151": "Siamese fighting fish", "152": "Polar bear", "153": "Brazilian guinea pig", "154": "Sooty mangabey", "155": "Pig - Tibetan", "156": "Lesser Egyptian jerboa", "157": "Javanese ricefish", "158": "Common wall lizard", "159": "Rabbit", "160": "Chimpanzee", "161": "Siberian musk deer", "162": "Dingo", "163": "Bolivian squirrel monkey", "164": "Long-tailed chinchilla", "165": "Drosophila melanogaster", "166": "Eastern brown snake", "167": "Pig - Largewhite", "168": "Australian saltwater crocodile", "169": "Anole lizard", "170": "Shortfin molly", "171": "Wallaby", "172": "Atlantic salmon", "173": "Domestic yak", "174": "Chinese medaka", "175": "Rat", "176": "Sheepshead minnow", "177": "Bushbaby", "178": "Eastern happy", "179": "Blue tit", "180": "Algerian mouse", "181": "Pig - Meishan", "182": "Atlantic herring", "183": "Japanese quail", "184": "Dog - Great Dane", "185": "Little spotted kiwi", "186": "Canada lynx", "187": "Swamp eel", "188": "Platyfish", "189": "Microbat", "190": "West African mud turtle", "191": "Armadillo", "192": "Greater amberjack", "193": "Eurasian sparrowhawk", "194": "Goodes thornscrub tortoise", "195": "American bison", "196": "Brown trout", "197": "Argentine black and white tegu", "198": "Mouse C3H/HeJ", "199": "Damara mole rat", "200": "Cow", "201": "Macaque", "202": "Golden-line barbel", "203": "Japanese medaka HdrR", "204": "Black snub-nosed monkey", "205": "Blunt-snouted clingfish", "206": "Elephant shark", "207": "Northern American deer mouse", "208": "Pig USMARC", "209": "Barramundi perch", "210": "Common carp german mirror", "211": "Hedgehog", "212": "Squirrel", "213": "Degu", "214": "Yellow-billed parrot", "215": "Medium ground-finch", "216": "Golden eagle", "217": "Climbing perch", "218": "Turkey", "219": "Abingdon island giant tortoise", "220": "Mouse WSB/EiJ", "221": "Tasmanian devil", "222": "Common canary", "223": "Mummichog", "224": "Panda", "225": "Gibbon", "226": "Zebra finch", "227": "Goldfish", "228": "White-throated sparrow", "229": "Dark-eyed junco", "230": "Guppy", "231": "Zig-zag eel", "232": "Chinese hamster CriGri", "233": "Upper Galilee mountains blind mole rat", "234": "Pig", "235": "Mouse AKR/J", "236": "Bonobo", "237": "Dog", "238": "Ocean sunfish", "239": "Small tree finch", "240": "C.savignyi",

"241": "Rainbow trout", "242": "Mongolian gerbil", "243": "Chicken", "244": "Blue-crowned manakin", "245": "Daurian ground squirrel", "246": "Wild yak", "247": "Coquerel's sifaka", "248": "Vervet-AGM", "249": "Stickleback", "250": "Hagfish", "251": "Ballan wrasse", "252": "Mouse LP/J", "253": "Bengalese finch", "254": "Mouse CAST/EiJ", "255": "Common snapping turtle", "256": "Sailfin molly", "257": "Pig - Hampshire", "258": "Tuatara", "259": "Shrew", "260": "Ryukyu mouse", "261": "Pig - Pietrain", "262": "European seabass", "263": "Swan goose", "264": "Denticle herring", "265": "Dolphin", "266": "Emu", "267": "Arctic ground squirrel", "268": "Cod", "269": "Ferret", "270": "Common carp hebao red", "271": "Orange clownfish", "272": "Silver-eye", "273": "Golden snub-nosed monkey", "274": "C.intestinalis", "275": "Pig - Berkshire", "276": "Pika", "277": "Sloth", "278": "Indian medaka", "279": "Red-bellied piranha", "280": "Arabian camel", "281": "Donkey", "282": "Asian bonytongue", "283": "Hybrid - Bos Taurus", "284": "Chinook salmon", "285": "Channel catfish", "286": "Cat"}}

<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>

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{"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": "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", "11": "Brown trout", "12": "Eastern brown snake", "13": "Mouse CAST/EiJ", "14": "Spiny chromis", "15": "Gorilla", "16": "Silver-eye", "17": "Sloth", "18": "Eurasian sparrowhawk", "19": "Mouse AKR/J", "20": "Sailfin molly", "21": "Greater bamboo lemur", "22": "Mangrove rivulus", "23": "Platypus", "24": "Live sharksucker", "25": "Megabat", "26": "Mouse NOD/ShiLtJ", "27": "Ferret", "28": "Coelacanth", "29": "Lion", "30": "Siamese fighting fish", "31": "Pig - Wuzhishan", "32": "Brazilian guinea pig", "33": "Sheepshead minnow", "34": "Beluga whale", "35": "Domestic yak", "36": "Orbiculate cardinalfish", "37": "Chinese hamster CHOK1GS", "38": "Kakapo", "39": "Orangutan", "40": "Daurian ground squirrel", "41": "Pig - Bamei", "42": "Mouse BALB/cJ", "43": "Common carp huanghe", "44": "Three-toed box turtle", "45": "Tongue sole", "46": "Chimpanzee", "47": "Ma's night monkey", "48": "Red-bellied piranha", "49": "Pig - Tibetan", "50": "Drill", "51": "Anole lizard", "52": "Duck", "53": "Common carp german mirror", "54": "Chilean tinamou", "55": "Marmoset", "56": "Chinese medaka", "57": "Greater amberjack", "58": "Mouse", "59": "Dark-eyed junco", "60": "Mouse DBA/2J", "61": "Arctic ground squirrel", "62": "Pig", "63": "Mallard", "64": "Dog - Great Dane", "65": "Great Tit", "66": "Pig - Pietrain", "67": "Mainland tiger snake", "68": "Pig - Jinhua", "69": "Lesser hedgehog tenrec", "70": "Climbing perch", "71": "Tuatara", "72": "Wild yak", "73": "Bushbaby", "74": "Degu", "75": "Siberian musk deer", "76": "Northern pike", "77": "Pig - Meishan", "78": "Gilthead seabream", "79": "Kangaroo rat", "80": "Ring-necked pheasant", "81": "Mummichog", "82": "American mink", "83": "Tasmanian devil", "84": "Horned golden-line barbel", "85": "Shrew mouse", "86": "Golden Hamster", "87": "Pachon cavefish", "88": "Mouse PWK/PhJ", "89": "Hybrid - Bos Taurus", "90": "Canada lynx", "91": "Wallaby", "92": "Argentine black and white tegu", "93": "Monterrey platyfish", "94": "Blue tit", "95": "Japanese quail", "96": "Microbat", "97": "Panda", "98": "Chinook salmon", "99": "Hedgehog", "100": "Ryukyu mouse", "101": "Chinese hamster CriGri", "102": "Tree Shrew", "103": "Central bearded dragon", "104": "Amazon molly", "105": "Helmeted guineafowl", "106": "Stickleback", "107": "Northern American deer mouse", "108": "Saccharomyces cerevisiae", "109": "Dog - Basenji", "110": "Golden eagle", "111": "Tiger tail seahorse", "112": "Chacoan peccary", "113": "Japanese medaka HdrR", "114": "Lamprey", "115": "Mexican tetra", "116": "Common snapping turtle", "117": "American black bear", "118": "Okarito brown kiwi", "119": "Gouldian finch", "120": "Mongolian gerbil", "121": "C.intestinalis", "122": "Mouse LP/J", "123": "Great spotted kiwi", "124": "Western mosquitofish", "125": "Periophthalmus magnuspinnatus", "126": "Mouse 129S1/SvImJ", "127": "Flycatcher", "128": "Yellow-billed parrot", "129": "Mouse C57BL/6NJ", "130": "Pig-tailed macaque", "131": "Dingo", "132": "Rainbow trout", "133": "Alpaca", "134": "Zig-zag eel", "135": "Hagfish", "136": "Common carp", "137": "Armadillo", "138": "Pig - Largewhite", "139": "Opossum", "140": "Lyretail cichlid", "141": "Goat", "142": "Barramundi perch", "143": "Small tree finch", "144": "Mouse WSB/EiJ", "145": "American beaver", "146": "Pig - Landrace", "147": "Elephant shark", "148": "Sperm whale", "149": "Spotted gar", "150": "Mouse CBA/J", "151": "Blue tilapia", "152": "Platyfish", "153": "Medium ground-finch", "154": "Paramormyrops kingsleyae", "155": "Tarsier", "156": "Common wall lizard", "157": "Swan goose", "158": "Blue-ringed sea krait", "159": "Common canary", "160": "Chinese hamster PICR", "161": "Vervet-AGM", "162": "Golden-collared manakin", "163": "Long-tailed chinchilla", "164": "Zebra finch", "165": "C.savignyi", "166": "Rat", "167": "Ocean sunfish", "168": "Little spotted kiwi", "169": "Indian medaka", "170": "Cow", "171": "Leopard", "172": "Atlantic salmon", "173": "Alpine marmot", "174": "Large yellow croaker", "175": "Upper Galilee mountains blind mole rat", "176": "Goodes thornscrub tortoise", "177": "Indian peafowl", "178": "Common carp hebao red", "179": "Denticle herring", "180": "Koala", "181": "Midas cichlid", "182": "Golden-line barbel", "183": "Turbot", "184": "Ruff", "185": "Pig USMARC", "186": "Pig - Hampshire", "187": "Human", "188": "Burrowing owl", "189": "Cod", "190": "Burton's mouthbrooder", "191": "Donkey", "192": "Guinea Pig", "193": "Clown anemonefish", "194": "Golden pheasant", "195": "Sheep", "196": "Red fox", "197": "Bonobo", "198": "Indian glassy fish", "199": "Tetraodon", "200": "Ballan wrasse", "201": "Pig - Berkshire", "202": "Hybrid - Bos Indicus", "203": "Budgerigar", "204": "Meerkat", "205": "European seabass", "206": "Elephant", "207": "Emu", "208": "Tiger", "209": "Drosophila melanogaster", "210": "Steppe mouse", "211": "Swamp eel", "212": "Japanese medaka HNI", "213": "Jewelled blenny", "214": "Mouse C3H/HeJ", "215": "Zebra mbuna", "216": "White-throated sparrow", "217": "Painted turtle", "218": "Zebrafish", "219": "Goldfish", "220": "Horse", "221": "Greater horseshoe bat", "222": "Eastern happy", "223": "Tropical clawed frog", "224": "Spoon-billed sandpiper", "225": "Angola colobus", "226": "Algerian mouse", "227": "Dog", "228": "Macaque", "229": "Squirrel", "230": "Mouse Lemur", "231": "Common wombat", "232": "Rabbit", "233": "Polar bear", "234": "Atlantic herring", "235": "Chicken", "236": "Fugu", "237": "Bicolor damselfish", "238": "Mouse NZO/HILtJ", "239": "Reedfish", "240": "Chinese softshell turtle", "241": "Blunt-snouted clingfish", "242": "Caenorhabditis elegans", "243": "Coquerel's sifaka", "244": "Agassiz's desert tortoise",

"245": "Guppy", "246": "Javanese ricefish", "247": "Makobe Island cichlid", "248": "Prairie vole", "249": "Gelada", "250": "Pinecone soldierfish", "251": "Arabian camel", "252": "Japanese medaka HSOK", "253": "Asiatic black bear", "254": "Bengalese finch", "255": "Hyrax", "256": "Turkey", "257": "Shrew", "258": "Golden snub-nosed monkey", "259": "Black snub-nosed monkey", "260": "Round goby", "261": "Asian bonytongue", "262": "Electric eel", "263": "American bison", "264": "Shortfin molly", "265": "Orange clownfish", "266": "Komodo dragon", "267": "Blind barbel", "268": "Ugandan red Colobus", "269": "Olive baboon", "270": "Lesser Egyptian jerboa", "271": "Cat", "272": "Pink-footed goose", "273": "Capuchin", "274": "Australian saltwater crocodile", "275": "Naked mole-rat female", "276": "Mouse FVB/NJ", "277": "Abingdon island giant tortoise", "278": "Gibbon", "279": "Mouse A/J", "280": "Yellowtail amberjack", "281": "Bolivian squirrel monkey", "282": "Crab-eating macaque", "283": "Damara mole rat", "284": "Huchen", "285": "Rufous-capped babbler", "286": "Blue-crowned manakin"}}

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

```
{"Specie": {"cat": {"Karyotype": ["A1", "A2", "A3", "B1", "B2", "B3", "B4", "C1", "C2", "D1", "D2", "D3", "D4", "E1", "E2", "E3", "F1", "F2", "X", "MT"]}}}
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<http://localhost:8080/karyotype?specie=cat&json=1>

```
{"Specie": {"dog": {"Karyotype": ["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", "27", "28", "29", "30", "31", "32", "33", "34", "35", "36", "37", "38", "X", "MT"]}}}
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<http://localhost:8080/karyotype?specie=dog&json=1>

```
{"Error": "Can not find internal name for species 'enrique'"}
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```
http://localhost:8080/chromosomeLength?specie=enrique&chromo=18&json=1
```

```
{"Specie": {"cat": {"Chromosome": {"X": {"Length": 130557009}}}}}
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```
http://localhost:8080/chromosomeLength?specie=cat&chromo=X&json=1
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{"Gene": {"FRAT1": {"Gene id": "ENSG00000165879", "Sequence":
"CGGCTCCCGCGGCTGCAGGCGCGGGCTAGAGTGCCTGGCGGGCTCCGGCTTCCGCGTCCGCCCCGGCCCCGGTCCAGACTTAGTCTTCAGCTCCGCGCCCGCTCCGCCGCGGCCACCGCGCCCGCCGGCAGCCGAGCCCC
<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", "Length": 8257, "Start": 84498325, "End": 84506581}}}
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```
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", "Length": 2645, "Start": 97319271, "End": 97321915}}}
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```
http://localhost:8080/geneInfo?gene=FRAT1&json=1
```

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{"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%"}}}}}
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<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%}}}}}
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<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
```