

# Package ‘DNAZooData’

October 12, 2023

**Title** DNA Zoo data package

**Version** 1.0.0

**Date** 2023-02-09

**Description** DNAZooData is a data package giving programmatic access to genome assemblies and Hi-C contact matrices uniformly processed by the [DNA Zoo Consortium](https://www.dnazoo.org/). The matrices are available in the multi-resolution `.hic` format. A URL to corrected genome assemblies in `.fastq` format is also provided to the end-user.

**License** MIT + file LICENSE

**URL** <https://github.com/js2264/DNAZooData>

**BugReports** <https://github.com/js2264/DNAZooData/issues>

**Depends** R (>= 4.2), HiCExperiment

**Imports** BiocFileCache, S4Vectors, rjson, utils, tools

**Suggests** dplyr, testthat, methods, BiocStyle, knitr, rmarkdown

**biocViews** ExperimentData, SequencingData

**Encoding** UTF-8

**VignetteBuilder** knitr

**LazyData** false

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.2.3

**git\_url** https://git.bioconductor.org/packages/DNAZooData

**git\_branch** RELEASE\_3\_17

**git\_last\_commit** db5a689

**git\_last\_commit\_date** 2023-04-25

**Date/Publication** 2023-10-12

**Author** Jacques Serizay [aut, cre]

**Maintainer** Jacques Serizay <jacquesserizay@gmail.com>

## R topics documented:

DNAZooData . . . . .	2
DNAZooDataCache . . . . .	2

<b>Index</b>	<b>4</b>
--------------	----------

---

DNAZooData	<i>DNAZooData</i>
------------	-------------------

---

### Description

Fetches files from the DNAZoo data portal and caches them using the BiocFileCache system.

### Arguments

`species` Any species processed by the DNA Zoo (check <https://www.dnazoo.org/assemblies>) for a browser-based explorer.

### Value

DNAZooData() returns a HicFile object, which can then be imported in memory using `HicExperiment::import()`. Metadata also points to a URL to directly fetch the genome assembly corrected by the DNA Zoo consortium.

### Examples

```
#####
## Importing DNAZoo `.hic` files ##
#####

head(DNAZooData())
hf <- DNAZooData(species = 'Anolis_carolinensis')
hf
```

---

DNAZooDataCache	<i>Manage cache / download files from the DNAZoo data portal</i>
-----------------	--

---

### Description

Managing DNAZoo data downloads via the integrated BiocFileCache system.

### Usage

```
DNAZooDataCache(...)
```

**Arguments**

... Arguments passed to internal `.setDNAZooDataCache` function

**Value**

BiocFileCache object

**Examples**

```
bfc <- DNAZooDataCache()  
bfc  
BiocFileCache::bfcinfo(bfc)
```

# Index

DNAZooData, [2](#)

DNAZooDataCache, [2](#)