

Package ‘norSTR’

May 9, 2026

Title Allele Frequencies for 50 Forensic STR Markers

Version 0.2.1

Description Allele frequency databases for 50 forensic short tandem repeat (STR) markers, covering Norway and several broader regional populations: Europe, Africa, South America, West Asia, Middle Asia, and East Asia. Developed and maintained for use at the Department of Forensic Sciences, Oslo, Norway.

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URL <https://github.com/magnusdv/norSTR>

BugReports <https://github.com/magnusdv/norSTR/issues>

Depends R (>= 3.5)

Encoding UTF-8

Language en-GB

LazyData true

RoxygenNote 7.3.2

NeedsCompilation no

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africaDB	<i>African STR allele frequency database</i>
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Description

Allele frequencies for 50 forensic short tandem repeat (STR) markers covering the African population.

Usage

africaDB

Format

A list of 50 frequency vectors. Each vector is a numeric with sum 1, and uses the allele labels as names.

Source

Department of Forensic Sciences, Oslo University Hospital.

Examples

africaDB[1:2]

eastAsiaDB	<i>East Asian STR allele frequency database</i>
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Description

Allele frequencies for 50 forensic short tandem repeat (STR) markers covering the East Asian population.

Usage

eastAsiaDB

Format

A list of 50 frequency vectors. Each vector is a numeric with sum 1, and uses the allele labels as names.

Source

Department of Forensic Sciences, Oslo University Hospital.

Examples

```
eastAsiaDB[1:2]
```

europeDB

European STR allele frequency database

Description

Allele frequencies for 50 forensic short tandem repeat (STR) markers covering the European population.

Usage

```
europeDB
```

Format

A list of 50 frequency vectors. Each vector is a numeric with sum 1, and uses the allele labels as names.

Source

Department of Forensic Sciences, Oslo University Hospital.

Examples

```
europeDB[1:2]
```

map50

Built-in linkage map

Description

A map providing the genetic positions (in centiMorgans) of each STR marker featured in this package.

Usage

```
map50
```

Format

A data frame with 50 rows and 4 columns: Marker, Chr, cM, Kit.

markerSets	<i>Common STR marker sets</i>
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Description

Lists of autosomal STR markers included in widely-used commercial forensic kits. Sex-determining (e.g. Amelogenin) and non-autosomal markers (e.g. Y markers) are explicitly omitted.

Usage

markerSets

Format

A named list of 6 character vectors of marker names.

Details

Kits included:

- codis: Expanded CODIS core loci (FBI/NIST), 21 autosomal STR markers.
- fusion6c: PowerPlex® Fusion 6C (Promega), 23 autosomal markers.
- globalfiler: GlobalFiler™ PCR Amplification Kit (Applied Biosystems), 21 autosomal markers.
- hdp1ex: HDplex STR Kit (Qiagen), 9 autosomal markers.
- sureid: SureID® 23comp Human STR Identification Kit (Health Gene Technologies), 23 autosomal markers.
- sureid27: Combined SureID® 23comp and SureID® PathFinder Plus; 26 autosomal markers.

Examples

markerSets\$fusion6c

midAsiaDB	<i>Mid Asian STR allele frequency database</i>
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Description

Allele frequencies for 50 forensic short tandem repeat (STR) markers covering the Mid Asian population.

Usage

midAsiaDB

Format

A list of 50 frequency vectors. Each vector is a numeric with sum 1, and uses the allele labels as names.

Source

Department of Forensic Sciences, Oslo University Hospital.

Examples

```
midAsiaDB[1:2]
```

norwayDB

Norwegian STR allele frequency database

Description

Allele frequencies for 50 forensic short tandem repeat (STR) markers covering the Norwegian population.

Usage

```
norwayDB
```

Format

A list of 50 frequency vectors. Each vector is a numeric with sum 1, and uses the allele labels as names.

Source

Department of Forensic Sciences, Oslo University Hospital.

Examples

```
norwayDB[1:2]
```

southAmericaDB *South American STR allele frequency database*

Description

Allele frequencies for 50 forensic short tandem repeat (STR) markers covering the South American population.

Usage

southAmericaDB

Format

A list of 50 frequency vectors. Each vector is a numeric with sum 1, and uses the allele labels as names.

Source

Department of Forensic Sciences, Oslo University Hospital.

Examples

southAmericaDB[1:2]

westAsiaDB *West Asian STR allele frequency database*

Description

Allele frequencies for 50 forensic short tandem repeat (STR) markers covering the West Asian population.

Usage

westAsiaDB

Format

A list of 50 frequency vectors. Each vector is a numeric with sum 1, and uses the allele labels as names.

Source

Department of Forensic Sciences, Oslo University Hospital.

westAsiaDB

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Examples

`westAsiaDB[1:2]`

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