

# Package ‘indel.shiny’

January 5, 2019

**Type** Package

**Title** Analyze heterozygous and homozygous indels

**Version** 1.5

**Date** 2019-01-05

**Author** Robert Deibel

**Maintainer** Anastasia Eskova <anastasia.eskova@tuebingen.mpg.de>

**Description** Shiny app for analysis of heterozygous and homozygous indels using .ab1 Sanger sequence files and reference sequence in fasta format as a .txt file.

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**Imports** BiocGenerics, Biostrings, crayon, knitr, msa, readr, sangerseqR, shiny

**NeedsCompilation** no

## R topics documented:

indel.shiny-package . . . . .	1
calculate.indel . . . . .	2
start_indel_shiny . . . . .	3
test.data . . . . .	4

<b>Index</b>	<b>5</b>
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indel.shiny-package	<i>Analyze heterozygous and homozygous indels</i>
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## Description

Shiny app for analysis of heterozygous and homozygous indels using .ab1 Sanger sequence files and reference sequence in fasta format as a .txt file.

**Details**

The DESCRIPTION file:

```
Package:      indel.shiny
Type:         Package
Title:        Analyze heterozygous and homozygous indels
Version:      1.5
Date:         2019-01-05
Author:       Robert Deibel
Maintainer:   Anastasia Eskova <anastasia.eskova@tuebingen.mpg.de>
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License:      MIT License + file LICENSE
Imports:      BiocGenerics, Biostrings, crayon, knitr, msa, readr, sangerseqR, shiny
```

Index of help topics:

```
calculate.indel      Calculates Indels for Base strings
indel.shiny-package  Analyze heterozygous and homozygous indels
start_indel_shiny    Start Shiny App
test.data            Test Data for the indel script
```

Use start\_indel\_shiny() to start the shiny application.

**Author(s)**

Robert Deibel

Maintainer: Anastasia Eskova <anastasia.eskova@tuebingen.mpg.de>

**Examples**

```
## Not run:
start_indel_shiny()

## End(Not run)
```

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calculate.indel	<i>Calculates Indels for Base strings</i>
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**Description**

Calculates and prints the found indels for a given String of IUPAC bases

**Usage**

```
calculate.indel(sequence, max.shift)
```

**Arguments**

sequence	A String of IUPAC bases
max.shift	An integer stating the preferred maximum shift length. Is 15 by default

**Value**

Calculated indel Strings with marked indel positions

**Author(s)**

Robert Deibel

**Examples**

```
## Not run:  
calculate.indel("AAAGGGTTTCCCGCT", 12)  
  
## End(Not run)
```

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start_indel_shiny	<i>Start Shiny App</i>
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**Description**

Start the shiny indel application

**Usage**

```
start_indel_shiny()
```

**Value**

The running shiny app

**Author(s)**

Anastasia Eskova

**Examples**

```
## Not run:  
start_indel_shiny()  
  
## End(Not run)
```

---

`test.data`*Test Data for the indel script*

---

**Description**

Can be used to test the `calculate.indel()` function.

**Usage**

`rivers`

**Format**

A string of bases in IUPAC notation

**Source**

Anastasia Eskova

# Index

\*Topic **datasets**

test.data, [4](#)

\*Topic **environment**

start\_indel\_shiny, [3](#)

\*Topic **manip**

calculate.indel, [2](#)

\*Topic **package**

indel.shiny-package, [1](#)

calculate.indel, [2](#)

indel.shiny (indel.shiny-package), [1](#)

indel.shiny-package, [1](#)

start\_indel\_shiny, [3](#)

test.data, [4](#)