

tgirtABRF

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tgirtABRF provides functions for labeling files from the work, *RNA-Seq of human reference RNA samples using a thermostable group II intron reverse transcriptase*.

Installing:

```
library(devtools)
install_github('wckdouglas/tgirtABRF')
```

To use the library:

```
library(tgirtABRF)
library(dplyr)
```

The naming system that was used in the project is as follow:

```
df <- read.csv('names.csv',header=F)
colnames(df) = 'names'
df
```

```
##           names
## 1  ABRF-ILMN-L-A-1
## 2  ABRF-ILMN-L-A-2
## 3  ABRF-ILMN-L-A-3
## 4  ABRF-ILMN-L-B-1
## 5  ABRF-ILMN-L-B-2
## 6  ABRF-ILMN-L-B-3
## 7  ABRF-ILMN-R-A-1
## 8  ABRF-ILMN-R-A-2
## 9  ABRF-ILMN-R-A-3
## 10 ABRF-ILMN-R-B-1
## 11 ABRF-ILMN-R-B-2
## 12 ABRF-ILMN-R-B-3
## 13 ABRF-ILMN-RIBO-A-1
## 14 ABRF-ILMN-RIBO-A-2
## 15 ABRF-ILMN-RIBO-A-3
## 16 ABRF-ILMN-RIBO-A-4
## 17 ABRF-ILMN-RIBO-B-1
## 18 ABRF-ILMN-RIBO-B-2
## 19 ABRF-ILMN-RIBO-B-3
## 20 ABRF-ILMN-RIBO-B-4
## 21 ABRF-ILMN-RIBO-C-1
## 22 ABRF-ILMN-RIBO-C-2
## 23 ABRF-ILMN-RIBO-C-3
## 24 ABRF-ILMN-RIBO-C-4
## 25 ABRF-ILMN-RIBO-D-1
## 26 ABRF-ILMN-RIBO-D-2
```

```
## 27 ABRF-ILMN-RIBO-D-3
## 28 ABRF-ILMN-RIBO-D-4
## 29 ABRF-ILMN-V-A-1
## 30 ABRF-ILMN-V-A-2
## 31 ABRF-ILMN-V-A-3
## 32 ABRF-ILMN-V-B-1
## 33 ABRF-ILMN-V-B-2
## 34 ABRF-ILMN-V-B-3
## 35 refA1
## 36 refA2
## 37 refA3
## 38 refB1
## 39 refB2
## 40 refB3
## 41 refC1
## 42 refC2
## 43 refC3
## 44 refD1
## 45 refD2
## 46 refD3
```

To extract the annotations from the sample names:

```
df %>%
  mutate(lab = getLab(names)) %>%
  mutate(mixTemplate = getTemplate(names)) %>%
  mutate(replicate = getReplicate(names)) %>%
  mutate(prepare = getPrep(names)) %>%
  data.frame()
```

##	names	lab	mixTemplate	replicate	prep
## 1	ABRF-ILMN-L-A-1	L	A	1	TruSeq v2
## 2	ABRF-ILMN-L-A-2	L	A	2	TruSeq v2
## 3	ABRF-ILMN-L-A-3	L	A	3	TruSeq v2
## 4	ABRF-ILMN-L-B-1	L	B	1	TruSeq v2
## 5	ABRF-ILMN-L-B-2	L	B	2	TruSeq v2
## 6	ABRF-ILMN-L-B-3	L	B	3	TruSeq v2
## 7	ABRF-ILMN-R-A-1	R	A	1	TruSeq v2
## 8	ABRF-ILMN-R-A-2	R	A	2	TruSeq v2
## 9	ABRF-ILMN-R-A-3	R	A	3	TruSeq v2
## 10	ABRF-ILMN-R-B-1	R	B	1	TruSeq v2
## 11	ABRF-ILMN-R-B-2	R	B	2	TruSeq v2
## 12	ABRF-ILMN-R-B-3	R	B	3	TruSeq v2
## 13	ABRF-ILMN-RIBO-A-1	W	A	1	TruSeq v3
## 14	ABRF-ILMN-RIBO-A-2	W	A	2	TruSeq v3
## 15	ABRF-ILMN-RIBO-A-3	W	A	3	TruSeq v3
## 16	ABRF-ILMN-RIBO-A-4	W	A	4	TruSeq v3
## 17	ABRF-ILMN-RIBO-B-1	W	B	1	TruSeq v3
## 18	ABRF-ILMN-RIBO-B-2	W	B	2	TruSeq v3
## 19	ABRF-ILMN-RIBO-B-3	W	B	3	TruSeq v3
## 20	ABRF-ILMN-RIBO-B-4	W	B	4	TruSeq v3
## 21	ABRF-ILMN-RIBO-C-1	W	C	1	TruSeq v3
## 22	ABRF-ILMN-RIBO-C-2	W	C	2	TruSeq v3

## 23	ABRF-ILMN-RIBO-C-3	W	C	3	TruSeq v3
## 24	ABRF-ILMN-RIBO-C-4	W	C	4	TruSeq v3
## 25	ABRF-ILMN-RIBO-D-1	W	D	1	TruSeq v3
## 26	ABRF-ILMN-RIBO-D-2	W	D	2	TruSeq v3
## 27	ABRF-ILMN-RIBO-D-3	W	D	3	TruSeq v3
## 28	ABRF-ILMN-RIBO-D-4	W	D	4	TruSeq v3
## 29	ABRF-ILMN-V-A-1	V	A	1	TruSeq v2
## 30	ABRF-ILMN-V-A-2	V	A	2	TruSeq v2
## 31	ABRF-ILMN-V-A-3	V	A	3	TruSeq v2
## 32	ABRF-ILMN-V-B-1	V	B	1	TruSeq v2
## 33	ABRF-ILMN-V-B-2	V	B	2	TruSeq v2
## 34	ABRF-ILMN-V-B-3	V	B	3	TruSeq v2
## 35	refA1 Lambowitz		A	1	TGIRT-seq
## 36	refA2 Lambowitz		A	2	TGIRT-seq
## 37	refA3 Lambowitz		A	3	TGIRT-seq
## 38	refB1 Lambowitz		B	1	TGIRT-seq
## 39	refB2 Lambowitz		B	2	TGIRT-seq
## 40	refB3 Lambowitz		B	3	TGIRT-seq
## 41	refC1 Lambowitz		C	1	TGIRT-seq
## 42	refC2 Lambowitz		C	2	TGIRT-seq
## 43	refC3 Lambowitz		C	3	TGIRT-seq
## 44	refD1 Lambowitz		D	1	TGIRT-seq
## 45	refD2 Lambowitz		D	2	TGIRT-seq
## 46	refD3 Lambowitz		D	3	TGIRT-seq