

Dowser: Simple lineage tree construction

Kenneth B. Hoehn

2024-10-21

Contents

Quick start of lineage tree reconstruction.

```
# Load required packages
library(alakazam)
library(dowser)

# load example AIRR tsv data
data(ExampleAirr)

# subset data for this example
ExampleAirr = ExampleAirr[ExampleAirr$clone_id %in% c("3170", "3184"),]

# Process example data into proper format, store isotype (optional)
clones = formatClones(ExampleAirr, traits="c_call")

# Build maximum parsimony trees for first two clones using
# phangorn package in R
trees <- getTrees(clones)

# simple tree plotting with ggtree R package with isotypes at tips
plots <- plotTrees(trees, tips="c_call",tipsize=2)

# plot tree of largest clone
plots[[1]]
```

3170

