Package 'identity'

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Title Jacquard Condensed Coefficients of Identity

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Description Calculate identity coefficients, based on Mark Abney's C code.

License GPL (>= 2)

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R topics documented:

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identity.coefs	*Compute condensed identify coefficients*

Description

Compute condensed identify coefficients.

Usage

```
identity.coefs (samples, pedigree)
```

Arguments

samples   either a vector of individual IDs or a matrix of two columns, each row reprepre-
                sents a pair of IDs.

pedigree   a matrix of three columns, id, mother id, and father id, respectively, specifying
                the pedigree structure.

Details

Id must be integers with 0 indicating individuals not included in the pedigree.

Note that each time this function is called, it will recreate the C representation of the pedigree
structure and the hash table. Thus it is very inefficient to call this function many times with the
same pedigree. Normally you would only need call the function once to calculate the identity
coefficients for all pairs of individuals.

Value

a matrix of 11 columns, the first two columns give the pair of IDs, and the rest 9 columns give the
9 identity coefficients (delta 1 to delta 9).

Author(s)

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References

This R package is based on the C program Idcoefs 2.0 beta by Mark Abney (abney@uchicago.edu).

See also Lynch and Walsh (1998) Genetics and Analysis of Quantitative Traits.

Examples

```
ex <- read.table (system.file ("example", "ex.pedigree",
                  package = "identity"))
identity.coefs (c(150, 151, 152), ex)
```

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