

The R package *trioClasses* for definition of the class *SNPTrioExperiment*, an extension of *SummarizedExperiment*, for use in trio based analyses of genetic data.

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## 1 Packages & Data

```
> library("trioClasses")
> data("sample")
> data("8q24-european-all.sm")
```

## 2 SummarizedExperiment

```
> se <- SummarizedExperiment(assays = SimpleList(cnv = t(sm)),
  colData = col.DF, rowData = gr)
```

## 3 Pedigree

```
> ped <- PedClass(ped.DF)
```

## 4 CNVTrioExperiment

```
> (cte <- CNVTrioExperiment(se, pedigree = ped))
```

```
class: CNVTrioExperiment
dim: 8951 960
exptData(0):
assays(1): cnv
rownames(8951): chr8:129296000 chr8:129296113 ...
  chr8:130354703 chr8:130354790
rowData metadata column names(0):
colnames(960): H_ME-DS10776_2-DS10776_2
  H_ME-DS10776_3-DS10776_3 ... H_ME-DS11313_3-DS11313_3
  H_ME-DS11313_1-DS11313_1
colData names(1): id
pedigree(4139): famid id fid mid sex dx
complete trios(320):
```