

# balselrexample

2024-02-18

```
library(balselr)
#Read In the VCF File
read_vcf(x=system.file(package="balselr", "example.vcf"))
```

```
##      CHR    POS ID REF ALT QUAL FILTER
##  1:    1     92  .   A   C 1000  PASS
##  2:    1    177  .   C   A 1000  PASS
##  3:    1    283  .   T   C 1000  PASS
##  4:    1    289  .   C   G 1000  PASS
##  5:    1    327  .   G   T 1000  PASS
## ---
## 834:   1  29734  .   A   T 1000  PASS
## 835:   1  29761  .   T   C 1000  PASS
## 836:   1  29795  .   A   T 1000  PASS
## ...
```

```
#Parse the VCF Files
ncd1input <-parse_vcf(infile=system.file(package="balselr", "example.vcf"), n0=108, type="ncd1")
```

```
##      CHR    POS ID REF ALT QUAL FILTER
##  1:    1     92  .   A   C 1000  PASS
##  2:    1    177  .   C   A 1000  PASS
##  3:    1    283  .   T   C 1000  PASS
##  4:    1    289  .   C   G 1000  PASS
##  5:    1    327  .   G   T 1000  PASS
## ---
## 834:   1  29734  .   A   T 1000  PASS
## 835:   1  29761  .   T   C 1000  PASS
## 836:   1  29795  .   A   T 1000  PASS
## ...
```

```
#Run ncd1 Test
ncd1(ncd1_input)
```

```
##      Win.ID SegSites IS  tf      MidMaf MidSNP      NCD1
##  1:      1      10 10 0.5 0.00462963    398 0.3906102
##  2:      2      12 12 0.5 0.38425926    627 0.4094693
##  3:      3      15 15 0.5 0.31018519    956 0.4236469
##  4:      4      16 16 0.5 0.02314815   1155 0.4265262
##  5:      5      17 17 0.5 0.01388889   1336 0.4270404
## ---
## 191:    191      19 19 0.5 0.24537037  29259 0.4167113
```

```
## 192:    192      18 18 0.5 0.27314815 29377 0.4134089
## 193:    193      15 15 0.5 0.24537037 29734 0.4096756
...
```