## StarTreck:Application Examples

Claudia Cava, Isabella Castiglioni 2016-10-06

## Introduction

In this vignette, we demonstrate the application of StarTrek as tool for pathways analysis integrating different data types. For basic use of the StarTrek package, please refer to the vignette Working with StarTrek package.

In many cases, StarTrek is used as tool to measure pathway activity and pathway cross-talk. However, StarTrek can also be combined with other tools (within or out of the scope of R and Bioconductor [Gentleman et al., 2004, Carey et al., 2005]), to build exible analysis pipelines. In this vignette we demonstrate the cooperation between StarTrek and other tools with several examples.

## Case Study n°1

To install use the code below.

```
path<-getKEGGdata(KEGG_path="Carb_met")
tumo<-SelectedSample(Dataset=Data_CANCER_normUQ_filt,typesample="tumor")[,1:100]
norm<-SelectedSample(Dataset=Data_CANCER_normUQ_filt,typesample="normal")[,1:100]
score_euc_dist<-dev_std_crtlk(dataFilt=Data_CANCER_normUQ_filt,path)
nf <- 60
res_class<-svm_classification(TCGA_matrix=score_euc_dist,nfs=nf,normal=colnames(norm),tumour=colnames(t)</pre>
```

## References