## **Identify Conserved Moieties**

## tutorial\_initConservedMoietyPaths

```
projectDir =
'~/work/sbgCloud/programExperimental/projects/tracerBased'
dataDir =
'~/work/sbgCloud/programExperimental/projects/tracerBased/data/'
softwareDir =
'~/work/sbgCloud/programExperimental/projects/tracerBased/software/'
visDataDir =
'~/work/sbgCloud/programExperimental/projects/tracerBased/data/visualisation/'
resultsDir =
'~/work/sbgCloud/programExperimental/projects/tracerBased/results/iDopaNeurol_ConservedMoieties/'
rxnfileDir =
'~/work/sbgCloud/code/fork-ctf/rxns/atomMapped'

if ~recompute || isequal(modelName,'iDopaNeurol')
    load([resultsDir modelName '_arm.mat'])
    return
end
```

## 1.2.3. Conserved moieties

With the atom mappings we obtained, we can compute the conserved moieties for the iDopaNeuro metabolic network using the atom transition network and the COBRA function identifyConservedMoieties.

```
switch modelName
    case 'DAS'
        load('DAS.mat')
    otherwise
        load([dataDir modelName '.mat'])
end
load([resultsDir modelName '_dATM.mat'])
options.sanityChecks=0;
[arm, moietyFormulae] = identifyConservedMoieties(model, dATM, options);
save([resultsDir modelName '_arm.mat'], 'arm', 'moietyFormulae', 'options')
```