```
{
 genes: [
       { name: 'ACE2' }, { name: 'ASH1' },
       { name: 'CIN5' }, { name: 'GCR2' },
       { name: 'GLN3' }, { name: 'HAP4' },
       { name: 'HMO1' }, { name: 'MSN2' },
       { name: 'SFP1' }, { name: 'STB5' },
       { name: 'SWI4' }, { name: 'SWI5' },
       { name: 'YHP1' }, { name: 'YOX1' },
       { name: 'ZAP1' }
 ],
 links: [
       source: 14,
       target: 0,
       value: 1,
       type: 'arrowhead',
       stroke: 'black'
       },
       source: 0,
       target: 1,
       value: 1,
       type: 'arrowhead',
       stroke: 'black'
       },
       source: 7,
       target: 1,
       value: 1,
       type: 'arrowhead',
       stroke: 'black'
       },
       source: 11,
       target: 1,
       value: 1,
       type: 'arrowhead',
       stroke: 'black'
       },
       source: 6,
       target: 2,
       value: 1,
```

```
type: 'arrowhead',
stroke: 'black'
},
source: 7,
target: 2,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
{
source: 12,
target: 4,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 2,
target: 5,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 6,
target: 5,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
{
source: 7,
target: 5,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 9,
target: 5,
value: 1,
type: 'arrowhead',
stroke: 'black'
```

```
},
source: 10,
target: 5,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 6,
target: 6,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 3,
target: 7,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 6,
target: 7,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 2,
target: 8,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
{
source: 7,
target: 8,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
{
```

```
source: 9,
target: 8,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 2,
target: 9,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 7,
target: 10,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 8,
target: 11,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 1,
target: 12,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 2,
target: 12,
value: 1,
type: 'arrowhead',
stroke: 'black'
},
source: 7,
target: 12,
```

```
value: 1,
       type: 'arrowhead',
       stroke: 'black'
       },
       source: 10,
       target: 12,
       value: 1,
       type: 'arrowhead',
       stroke: 'black'
       },
       source: 6,
       target: 13,
       value: 1,
       type: 'arrowhead',
       stroke: 'black'
       },
       source: 7,
       target: 13,
       value: 1,
       type: 'arrowhead',
       stroke: 'black'
       },
       source: 10,
       target: 13,
       value: 1,
       type: 'arrowhead',
       stroke: 'black'
       }
 ],
 errors: [
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 17, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 18, column A in the production_rates sheet is
not a string.",
```

```
suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 19, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 20, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 21, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 22, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 23, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 24, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 25, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
```

```
errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 26, column A in the production rates sheet is
not a string.".
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 27, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 28, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 29, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 30, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 31, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 32, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
```

```
possibleCause: "Gene 'undefined' in row 33, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       {
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 34, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       {
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 35, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 36, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
      ... 1048460 more items
],
warnings: [],
positiveWeights: [
      1, 1, 1, 1, 1, 1, 1, 1,
      1, 1, 1, 1, 1, 1, 1, 1,
      1, 1, 1, 1, 1, 1, 1, 1,
      1, 1, 1, 1
],
negativeWeights: [],
sheetType: 'unweighted',
meta: {
      data: {
      alpha: 0.002,
      kk_max: 1,
      MaxIter: 100000000,
      TolFun: 0.000001,
      MaxFunEval: 100000000,
      ToIX: 0.000001,
      production_function: 'Sigmoid',
      L_curve: 0,
      estimate_params: 1,
      make_graphs: 1,
      fix_P: 0,
      fix b: 0,
      expression_timepoints: [ 15, 30, 60 ],
      Strain: ['wt', 'dcin5', 'dgln3', 'dhap4', 'dhmo1', 'dzap1'],
      simulation_timepoints: [
      0, 5, 10, 15, 20, 25,
      30, 35, 40, 45, 50, 55,
      60
      ],
      species: 'Saccharomyces cerevisiae',
      taxon_id: 559292
      },
      errors: [],
      warnings: []
},
expression: {
      wt_log2_expression: {
      errors: [],
```

```
warnings: [],
timePoints: [
15, 15, 15, 15, 30, 30,
30, 30, 30, 60, 60, 60,
60
],
columnGeneNames: [
'ACE2', 'ASH1', 'CIN5',
'GCR2', 'GLN3', 'HAP4',
'HMO1', 'MSN2', 'SFP1',
'STB5', 'SWI4', 'SWI5',
'YHP1', 'YOX1', 'ZAP1'
],
data: {
id: [
15, 15, 15, 15, 30, 30,
30, 30, 30, 60, 60, 60,
60
],
ACE2: [
0.6139, -1.0689,
0.1906, -0.398,
0.5827, <1 empty item>,
-0.3947, -0.6264,
0.3377, 0.817,
0.5566, -0.4357,
-1.2497
],
ASH1: [
0.97, 0.3043,
-0.9904, -0.2636,
-0.382, 0.4206,
-0.4911, -0.1284,
-0.7236, -1.3477,
-1.0468, -1.0978,
-0.9248
],
CIN5: [
-0.1373, -0.0997, 1.2386,
1.3909, -0.4224, 0.5461,
1.0285, 1.2338, 2.2159,
2.1796, 0.8447, 2.4687,
1.4785
],
```

```
GCR2: [
0.5064, 0.8905,
-0.1242, -1.1405,
0.3837, 0.8525,
0.0988, -0.3273,
-0.2982, -0.315,
-0.5999, -0.9447,
-0.3585
],
GLN3: [
-1.3141, 0.3939, 0.1439,
-0.5133, -0.7004, -0.2467,
1.4085, 0.9733, 0.6504,
0.2025, 0.8924, 0.9007,
0.1953
],
HAP4: [
0.5138, 1.9214,
-0.8859, -2.6542,
0.138, 1.5184,
0.2794, -2.5135,
-1.1181, 0.2225,
-1.0353, -0.2074,
-1.8463
],
HMO1: [
0.3058, 0.2392, 1.8398,
1.2493, -0.9525, 1.405,
1.3109, 1.2569, 1.9007,
1.4816, 0.938, 1.8391,
2.2172
],
MSN2: [
-1.0625, 0.9246, 0.1666,
-0.2696, 0.3585, 0.9514,
0.1233, 1.2802, -0.6808,
0.7634, 1.3451, 0.8355,
-0.1271
],
SFP1: [
0.0307, 2.1525, 1.2789,
-0.4526, 0.6917, 0.5342,
2.2598, -0.9232, 0.8293,
1.3828, 0.9004, 0.8888,
```

```
-1.0367
],
STB5: [
-1.6758, -0.4986,
0.38, -0.1274,
-2.5269, -1.9189,
0.5443, 0.0845,
0.0407, -1.3691,
-2.6627, 0.2028,
-0.2748
],
SWI4: [
-0.9286, -0.023,
-0.3651, -0.3278,
-0.4798, 0.2047,
0.3222, -0.2377,
-0.6369, -1.4226,
-0.5294, 0.2996,
0.2812
],
SWI5: [
-0.7675, -0.2033,
-0.9106, -0.7234,
-1.9049, 0.7854,
-0.257, -0.1687,
-1.0667, 0.1028,
-0.0286, 0.4798,
0.097
],
YHP1: [
-1.1269, -0.21, -0.6676,
-1.6964, -0.3496, 1.2371,
0.9432, -0.3621, -1.8086,
0.6617, 0.6192, 0.205,
-0.725
],
YOX1: [
-0.2025, -1.0587,
-0.6402, -2.2532,
-0.083, -1.6117,
-0.104, -0.1487,
-0.9394, -0.5901,
0.1329, -0.7222,
-0.5117
```

```
],
ZAP1: [
0.6594, 0.6135, 0.3238,
-0.3712, 1.4712, 1.9049,
0.599, -0.2354, -0.394,
2.9606, 3.5569, 1.3863,
null
]
}
dcin5_log2_expression: {
errors: [],
warnings: [],
timePoints: [
15, 15, 15, 15, 30,
30, 30, 30, 60, 60,
60,60
],
columnGeneNames: [
'ACE2', 'ASH1', 'CIN5',
'GCR2', 'GLN3', 'HAP4',
'HMO1', 'MSN2', 'SFP1',
'STB5', 'SWI4', 'SWI5',
'YHP1', 'YOX1', 'ZAP1'
],
data: {
id: [
15, 15, 15, 15, 30,
30, 30, 30, 60, 60,
60,60
],
ACE2: [
-0.1718, -0.2792,
-0.1752, -0.6884,
-0.2436, 0.1581,
-0.4253, <1 empty item>,
0.5682, 0.1646,
-0.3202, -0.3888
],
ASH1: [
-1.3229, -0.4236,
-1.8945, -1.6929,
-2.2704, -1.0939,
-1.3098, -1.017,
```

```
-1.7106, -1.7777,
-1.9029, -1.3284
],
CIN5: [
-0.6685,
              <1 empty item>,
-0.4322,
              -0.1191,
-0.383,
              0.2693,
-0.0757,
              0.5975,
<1 empty item>, -0.3216,
0.0805,
              0.4778
],
GCR2: [
-0.3155, 1.4649,
-0.8029, 0.5141,
-0.7654, -1.1456,
0.5096, -0.2957,
-0.2257, -0.9404,
-1.3326, 0.1689
],
GLN3: [
0.9621, -0.3518,
0.3101, -0.1589,
0.5869, 0.0341,
0.486, 0.4342,
1.0717, 0.0559,
1.1548, 0.5446
],
HAP4: [
0.0633, 0.1712,
-1.9531, -0.2151,
-1.463, 0.3025,
-2.2646, 1.4417,
-1.2318, -0.1403,
-1.9814, -1.2117
],
HMO1: [
-0.9169, 1.2958,
0.427, -0.0712,
1.5911, 1.2566,
0.391, -0.3126,
1.5823, 2.7767,
0.9466, 1.4665
],
MSN2: [
```

```
<1 empty item>, -0.5489,
0.2491,
              0.9036,
-0.5302,
              0.016,
-0.0997,
              1.0787,
-0.1371,
              0.029,
0.4011,
              0.0603
],
SFP1: [
1.0932, 0.4726,
1.1255, 0.6263,
0.5256, -0.3325,
1.6525, -0.1135,
0.61, 0.6721,
0.9582, 0.3127
],
STB5: [
1.259, 1.0717,
0.916, 0.804,
-1.9025, -0.4406,
0.5659, 1.258,
0.4927, 0.2925,
1.6588, 1.1319
],
SWI4: [
-0.4763, -0.4529,
-0.3336, -0.5489,
2.5266, 0.4041,
0.0257, -0.2142,
-0.3101, 0.905,
0.092, 0.2312
],
SWI5: [
-0.1331, 0.1802,
-0.3214, -0.0182,
0.8526, -0.4332,
0.2249, -0.7035,
0.0663, -0.4419,
0.9222, 0.209
],
YHP1: [
-1.2421, 0.3344,
-0.735, 0.2935,
-1.2684, -0.8782,
1.0021, -0.7668,
```

```
0.9796, -0.0528,
-0.8693, 0.5579
],
YOX1: [
-1.3434, -0.9354,
-1.7084, -0.2822,
-0.0589, -0.7158,
-0.1155, -2.4802,
0.6657, 0.5316,
-1.3987, 0.2985
],
ZAP1: [
0.8344, 0.8398,
0.9184, 0.4747,
2.3845, 0.1525,
0.6511, -0.8263,
0.3113, -0.0906,
0.9699, -0.0441
]
}
},
dgln3_log2_expression: {
errors: [],
warnings: [],
timePoints: [
15, 15, 15, 15, 30,
30, 30, 30, 60, 60,
60,60
],
columnGeneNames: [
'ACE2', 'ASH1', 'CIN5',
'GCR2', 'GLN3', 'HAP4',
'HMO1', 'MSN2', 'SFP1',
'STB5', 'SWI4', 'SWI5',
'YHP1', 'YOX1', 'ZAP1'
],
data: {
id: [
15, 15, 15, 15, 30,
30, 30, 30, 60, 60,
60,60
],
ACE2: [
-0.8095, -0.6243,
```

```
-1.1296, -1.1113,
-1.408, 2.6021,
-0.4079, 1.2346,
1.1846, -0.0588,
0.4404, -0.1933
],
ASH1: [
-1.0181, -0.3813,
0.5164, -0.17,
0.4056, -0.3139,
-1.1147, -0.9282,
0.9089, -0.5136,
-0.6743, -1.3101
],
CIN5: [
1.452, 0.3668, 0.1465,
1.0023, 1.662, 2.9945,
1.3996, 1.9426, 0.2912,
0.6282, 3.2391, 2.5788
],
GCR2: [
-0.5184,
              1.3267,
1.0101,
              -0.0616,
<1 empty item>, -0.1998,
1.1081,
              0.1989,
1.6447,
              -1.6054,
0.7045,
              0.7673
],
GLN3: [
0.5957, 0.8549,
-0.6759, 0.6343,
-0.0861, -1.0684,
0.3023, 0.4177,
0.1085, -0.446,
0.8018, -0.161
],
HAP4: [
3.3136, 1.8683,
0.9064, 0.2848,
1.2426, 1.4451,
0.9148, -0.0132,
1.2979, 0.1059,
-0.2976, 0.2256
],
```

```
HMO1: [
0.9772, 1.4618,
-0.7156, 0.7899,
1.5735, 1.1125,
1.1016, 0.5146,
1.3433, 0.9501,
1.5648, 1.7134
],
MSN2: [
1.0775, -1.2575,
0.9656, 0.1669,
0.9394, 0.6417,
0.5814, 2.5089,
0.8539, 1.4608,
0.7794, -0.287
],
SFP1:[
-0.4157, 0.884,
1.2987, 1.3916,
1.055, -0.6434,
2.4701, 2.3169,
1.2748, 1.2483,
0.2385, 1.2221
],
STB5: [
0.8397, 0.8573,
0.2292, <1 empty item>,
1.1875, 0.2161,
0.0347, 0.9642,
0.7419, 0.1088,
0.6585, 0.2671
],
SWI4: [
0.1741, -0.5323,
-1.2532, -0.0805,
-0.3044,
              0.44,
-1.0187, -0.5621,
-0.8838, 0.9617,
-0.8963, -0.2724
],
SWI5: [
-0.5215,
              -1.3444,
              0.0665,
0.4807,
-0.0551,
              -0.2995,
```

```
-0.4057,
              -0.4289,
<1 empty item>, -0.9991,
0.4751,
              0.2162
],
YHP1: [
-0.7022, 0.5408,
-0.0443, 0.5406,
0.8118, 0.9184,
2.4355, 1.1496,
1.0066, -0.2962,
0.3564, 1.0391
],
YOX1: [
<1 empty item>, 0.5644,
-0.0194,
              0.8211,
1.1649,
              0.3713,
0.6099,
              0.9206,
0.9647,
              0.491,
0.9253,
              1.2979
],
ZAP1: [
-1.2207,
              -0.2262,
<1 empty item>, 0.405,
-0.5982,
              1.7576,
<1 empty item>, 1.3799,
-1.6436,
              -0.5111,
-1.0852,
              null
]
}
},
dhap4_log2_expression: {
errors: [],
warnings: [],
timePoints: [
15, 15, 15, 15, 30,
30, 30, 30, 60, 60,
60,60
],
columnGeneNames: [
'ACE2', 'ASH1', 'CIN5',
'GCR2', 'GLN3', 'HAP4',
'HMO1', 'MSN2', 'SFP1',
'STB5', 'SWI4', 'SWI5',
'YHP1', 'YOX1', 'ZAP1'
```

```
],
data: {
id: [
15, 15, 15, 15, 30,
30, 30, 30, 60, 60,
60,60
],
ACE2: [
-0.558, -0.313,
-0.0886, 0.5674,
-0.448, -0.4768,
-0.598, -0.1176,
-0.2783, -0.6083,
-0.6331, 0.1985
],
ASH1: [
-1.5401, -0.0523,
-0.7026, -0.4933,
-0.8167, -0.0028,
-0.6568, -1.0267,
-1.9867, -1.5253,
-1.0837, -1.5982
],
CIN5: [
-0.3943, 3.098,
-0.7818, 0.5366,
1.0477, 1.9388,
1.9985, 1.948,
2.8678, 3.26,
2.2513, 1.9187
],
GCR2: [
1.5094, 0.4057,
0.5999, 1.291,
1.5787, -0.5042,
1.659, 1.728,
0.4889, -0.2991,
0.9863, 0.9578
],
GLN3: [
-0.4169, 0.6492,
-0.1259, 0.7149,
0.0457, 0.2932,
-0.3901, 0.2321,
```

```
0.9238, 0.3174,
-0.0252, 1.0246
],
HAP4: [
0.4102, -0.9203,
0.3786, -0.8169,
0.0301, -1.4462,
-0.3025, -0.3727,
-0.2195, -1.1639,
0.2619, -0.5285
],
HMO1: [
2.9631, 0.0054,
1.0227, -1.8079,
2.6496, 1.8897,
1.3275, -2.4363,
1.3018, -0.2604,
2.3205, -0.2676
],
MSN2: [
0.8346, 0.5458,
-0.4035, 0.5827,
1.0075, 0.8038,
1.1451, 0.6532,
1.4213, 0.7549,
0.3324, 0.3404
],
SFP1: [
0.475, 0.8935,
0.0344, 0.9253,
-0.2822, 0.8125,
0.4466, 0.3866,
-0.1762, 0.4906,
0.4941, 0.4523
],
STB5: [
-0.1941, -0.1977,
0.3222, <1 empty item>,
0.4058, -0.84,
0.4143, <2 empty items>,
-0.1119, 0.4121,
0.1617
],
SWI4: [
```

```
0.857, 0.3944,
-0.0101, -0.8563,
-0.1573, -0.1339,
-0.1171, <1 empty item>,
0.3775, 0.4539,
0.3331, 0.2096
],
SWI5: [
<1 empty item>, 0.1491,
-0.9615,
              0.6945,
-1.177,
              0.155,
-1.3155,
              -0.1184,
-1.0331,
              0.07,
-0.7403,
              0.728
],
YHP1: [
-0.8778, -0.5421,
-1.4449, -0.6419,
-0.986, -0.0224,
-0.4459, -0.1383,
0.9324, 1.2889,
0.6571, 0.9774
],
YOX1: [
-1.7099, -1.3898,
-2.1356, -1.6842,
-0.1238, -1.0174,
0.37, -1.6723,
-0.259, -0.2008,
-1.5284, -1.0413
],
ZAP1: [
-1.903, <1 empty item>,
1.5545, -0.0849,
-0.6127, 1.2343,
-0.5888, -0.8746,
-0.8822, 0.6754,
-0.7341, -0.5958
]
}
},
dhmo1_log2_expression: {
errors: [],
warnings: [],
```

```
timePoints: [
15, 15, 15, 15, 30,
30, 30, 30, 60, 60,
60,60
],
columnGeneNames: [
'ACE2', 'ASH1', 'CIN5',
'GCR2', 'GLN3', 'HAP4',
'HMO1', 'MSN2', 'SFP1',
'STB5', 'SWI4', 'SWI5',
'YHP1', 'YOX1', 'ZAP1'
],
data: {
id: [
15, 15, 15, 15, 30,
30, 30, 30, 60, 60,
60,60
],
ACE2: [
0.2392, -0.3695,
-1.0907, 0.1755,
0.527, -0.1989,
-0.9593, -0.2329,
0.0175, -0.4998,
-0.2991, -0.2388
],
ASH1: [
0.2718, 1.0969,
0.0825, -0.4366,
-2.2907, 0.5026,
-0.2715, -0.5741,
-1.5159, 0.4211,
1.7901, -0.8754
],
CIN5: [
0.6239, 0.8184,
1.4916, -0.8397,
0.8867, 1.2387,
2.2606, 0.3293,
1.2067, 1.7983,
-0.7066, 1.0148
],
GCR2: [
-0.5316, -0.2221,
```

```
1.0726, -0.9918,
0.3892, 0.3353,
-0.2957, -0.4503,
0.2892, 1.2637,
0.0502, -0.8057
],
GLN3: [
-0.3938, 0.0786,
-0.9799, 0.3603,
-0.5682, -0.0728,
-0.186, 0.6306,
0.2917, -0.1706,
0.2925, 0.8914
HAP4: [
0.2944, -1.0325,
-0.3442, 0.8937,
-1.578, -1.4498,
-0.7384, -0.2666,
-1.5417, -3.0545,
1.8973, -0.8844
],
HMO1: [
1.0058, -0.0317,
2.0181, 0.7888,
-0.2066, 0.3846,
0.0914, 0.1787,
0.1767, 0.4898,
0.8354, 0.4644
],
MSN2: [
-0.3229, -0.3717,
-0.8013, 0.4516,
-0.3778, -0.3248,
-0.4761, 0.9505,
-0.2303, -0.5603,
1.2227, 0.5789
],
SFP1: [
1.2329, 2.2441,
0.4948, -0.6945,
-0.8346, 1.8561,
-0.5287, -0.6066,
0.9984, 1.3966,
```

```
-0.1514, -0.5851
],
STB5: [
1.5366,
              0.5574,
<2 empty items>, 0.297,
0.1843,
              0.1582,
<1 empty item>, 1.7097,
0.6198,
              null,
null
],
SWI4: [
0.5249, 0.1762,
-0.1695, 0.3361,
1.0117, -0.5471,
-0.1491, 0.2608,
0.7408, -0.5783,
0.4557, 0.5229
],
SWI5: [
-1.5273, -0.0479,
-0.4886, -0.0472,
-0.3741, -0.8655,
-1.1639, -0.2628,
-0.6299, 0.0682,
0.3035, -0.5416
],
YHP1: [
-0.182, -1.0702,
-0.8447, -1.0068,
0.1177, -0.3511,
0.0224, -0.6165,
0.7703, -1.1442,
-0.8058, 0.1403
YOX1: [
-2.4929, -0.4533,
-0.2265, -1.1137,
-0.9117, -0.248,
-0.0783, -1.7543,
-0.7781, -0.3231,
0.2596, -2.0924
],
ZAP1: [
-0.2308, -0.3917,
```

```
-1.0017, 0.1766,
0.0117, 0.1751,
-0.9756, -0.5304,
0.4411, -0.709,
-0.0099, 0.8415
}
},
dzap1_log2_expression: {
errors: [],
warnings: [],
timePoints: [
15, 15, 15, 15, 30,
30, 30, 30, 60, 60,
60,60
],
columnGeneNames: [
'ACE2', 'ASH1', 'CIN5',
'GCR2', 'GLN3', 'HAP4',
'HMO1', 'MSN2', 'SFP1',
'STB5', 'SWI4', 'SWI5',
'YHP1', 'YOX1', 'ZAP1'
],
data: {
id: [
15, 15, 15, 15, 30,
30, 30, 30, 60, 60,
60,60
],
ACE2: [
-0.2778, -0.804,
-0.3835, 0.328,
-0.6418, -0.8003,
-3.4693, -1.458,
0.2762, -0.7411,
-1.2214, -0.5369
],
ASH1: [
1.3934, -0.5424,
0.2105, 2.8875,
0.6473, -0.8143,
0.2084, -0.8951,
-0.0794, -1.7999,
-0.441, -1.2416
```

```
],
CIN5: [
<1 empty item>, 2.4162,
1.1741,
              0.7413,
1.7565,
              2.5972,
0.8693,
              2.4257,
1.5716,
              3.7502,
2.3832,
              2.675
],
GCR2: [
0.6693, 0.4593,
-0.1973, 1.153,
-0.1936, 0.3101,
0.9935, 0.3293,
0.2218, -0.2001,
0.8909, 0.6109
],
GLN3: [
0.4944, 0.6415,
-0.1257, 0.9388,
0.6684, 0.4256,
0.198, 0.5877,
0.5854, 0.178,
0.0267, 1.0084
],
HAP4: [
0.9889, 1.6616,
0.5464, 1.3427,
0.0359, -0.3139,
0.246, -1.816,
-0.1356, -0.6358,
-0.2169, -1.1214
],
HMO1: [
0.3519, 1.4939, 2.1933,
0.7561, 0.3961, 1.6777,
1.8124, 0.7252, 1.168,
2.1741, 2.2209, 2.0417
],
MSN2: [
-0.1455, 0.7077,
-0.3519, 0.9785,
1.0745, 0.5327,
0.5032, 1.0997,
```

```
1.1006, 0.4626,
-0.2581, 0.848
],
SFP1: [
0.5518, 0.6949,
0.4098, 0.5577,
0.82, 1.0041,
1.372, 1.4371,
-0.6863, 0.0001,
0.3495, 0.5506
],
STB5: [
0.3316, -3.3906,
0.8183, -0.0735,
-0.161, 0.5405,
0.5489, 0.5018,
-0.5358, -0.1065,
1.1893, 0.1914
],
SWI4: [
-0.0389, -0.9307,
0.4958, -0.0196,
0.4521, -0.6053,
-0.7988, -0.1749,
0.3006, 0.0909,
-0.7866, 0.2419
],
SWI5: [
-1.0275, -0.3405,
-1.2339, -0.6617,
1.0472, -0.2527,
-0.8267, -0.5495,
-0.217, -0.1531,
-0.3907, -0.2836
],
YHP1: [
-0.7061, -0.8436,
-2.1758, -1.6097,
-0.7422, 0.4833,
0.6116, -0.0835,
-0.4454, 0.3472,
0.7491, 0.6957
],
YOX1: [
```

```
-1.7194, -0.4979,
      -1.2355, -1.9155,
       -0.5178, 0.6255,
       -0.8938, -0.5063,
      -1.0352, 0.8516,
       -0.3387, -1.0581
      ],
       ZAP1: [
       <1 empty item>, 0.1287,
       0.7379,
                     0.7652,
      -1.2348,
                     -0.2555,
       -5.062,
                     -0.2373,
       <1 empty item>, 0.6914,
      -2.676
                     -0.8246
      ]
      }
      }
 },
 test: {
       production_rates: {
       data: {
       ACE2: 0.2236,
       ASH1: 0.4332,
       CIN5: 0.2009,
       GCR2: 0.1925,
       GLN3: 0.3224,
       HAP4: 0.2718,
       HMO1: 0.099,
       MSN2: 0.4077,
       SFP1: 0.6931,
       STB5: 0.14,
       SWI4: 0.2829,
       SWI5: 0.3224,
       YHP1: 0.1733,
       YOX1: 0.7296,
       ZAP1: 0.1042
      },
       errors: [
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 17, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
      },
```

```
errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 18, column A in the production rates sheet is
not a string.".
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 19, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 20, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 21, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 22, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 23, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 24, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
```

```
possibleCause: "Gene 'undefined' in row 25, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       {
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 26, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       {
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 27, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 28, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 29, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 30, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 31, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 32, column A in the production rates sheet is
not a string.",
```

```
suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID GENE TYPE',
       possibleCause: "Gene 'undefined' in row 33, column A in the production_rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 34, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 35, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'INVALID_GENE_TYPE',
       possibleCause: "Gene 'undefined' in row 36, column A in the production rates sheet is
not a string.",
       suggestedFix: 'Please make your gene name a string starting with a letter.'
       },
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
```

possibleCause: 'This workbook has over 20 errors.',

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

```
errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       {
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
on the Documentation page and try again. If you fix these errors and try to upload again, there
may be further errors detected. As a general approach for fixing the errors, consider copying
and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'
       },
       errorCode: 'ERRORS_OVERLOAD',
       possibleCause: 'This workbook has over 20 errors.',
       suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined
```

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

suggestedFix: 'Please check the format of your spreadsheet with the guidlines outlined on theDocumentation page and try again. If you fix these errors and try to upload again, there may be further errors detected. As a general approach for fixing the errors, consider copying and pasting just your adjacency matrix into a fresh Excel Workbook and saving it.'

```
},
{
errorCode: 'ERRORS_OVERLOAD',
possibleCause: 'This workbook has over 20 errors.',
```

```
},
{
```

errorCode: 'ERRORS\_OVERLOAD', possibleCause: 'This workbook has over 20 errors.',

```
},
... 1048460 more items
],
warnings: []
},
degradation_rates: {
data: {
ACE2: 0.1118,
ASH1: 0.2166.
CIN5: 0.1005,
GCR2: 0.0963,
GLN3: 0.1612,
HAP4: 0.1359,
HMO1: 0.0495,
MSN2: 0.2039,
SFP1: 0.3466,
STB5: 0.07,
SWI4: 0.1415,
SWI5: 0.1612,
YHP1: 0.0866,
YOX1: 0.3648,
ZAP1: 0.0521
},
errors: [],
warnings: []
},
threshold_b: {
data: {
ACE2: 0,
ASH1: 0,
CIN5: 0,
GCR2: 0,
GLN3: 0,
HAP4: 0,
HMO1: 0,
MSN2: 0,
SFP1: 0,
STB5: 0,
```

```
SWI4: 0,
SWI5: 0,
YHP1: 0,
YOX1: 0,
ZAP1: 0
},
errors: [],
warnings: []
}
```