

# BD\_Lumped

subsystem

Taurine and hypotaurine metabolism  
Lysine metabolism  
Fructose and mannose metabolism  
Valine, leucine, and isoleucine metabolism  
Transport, endoplasmic reticular  
Miscellaneous  
Methionine and cysteine metabolism  
Fatty acid oxidation

0

10

20

30

40

# of disrupted reactions

p.val.fdr ( $\leq 0.05$ )

0.03

0.02

0.01



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subsystem

Taurine and hypotaurine metabolism  
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Valine, leucine, and isoleucine metabolism  
Transport, endoplasmic reticular  
Miscellaneous  
Methionine and cysteine metabolism  
Fatty acid oxidation

0

10

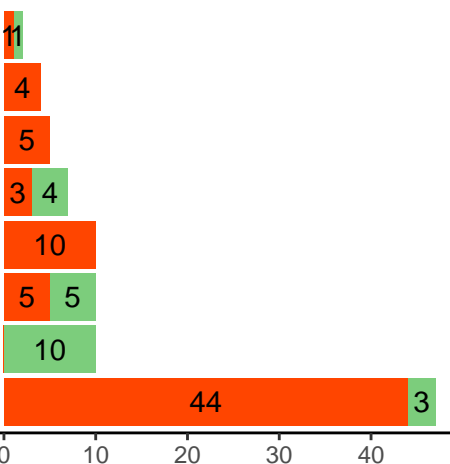
20

30

40

# of disrupted reactions

Direction of disruption



# BD\_Responder

subsystem

Transport, nuclear

Fatty acid oxidation

0

10

20

30

# of disrupted reactions

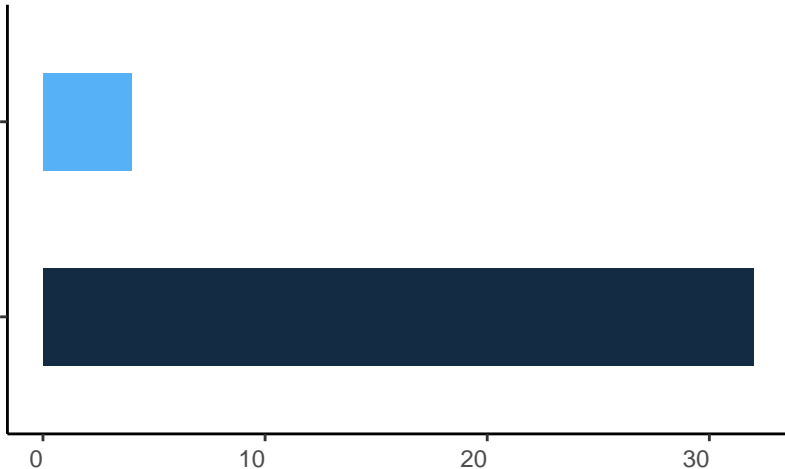
p.val.fdr ( $\leq 0.05$ )

0.04

0.03

0.02

0.01



# BD\_Responder

subsystem

Transport, nuclear

3

1

Fatty acid oxidation

5

27

Direction of disruption



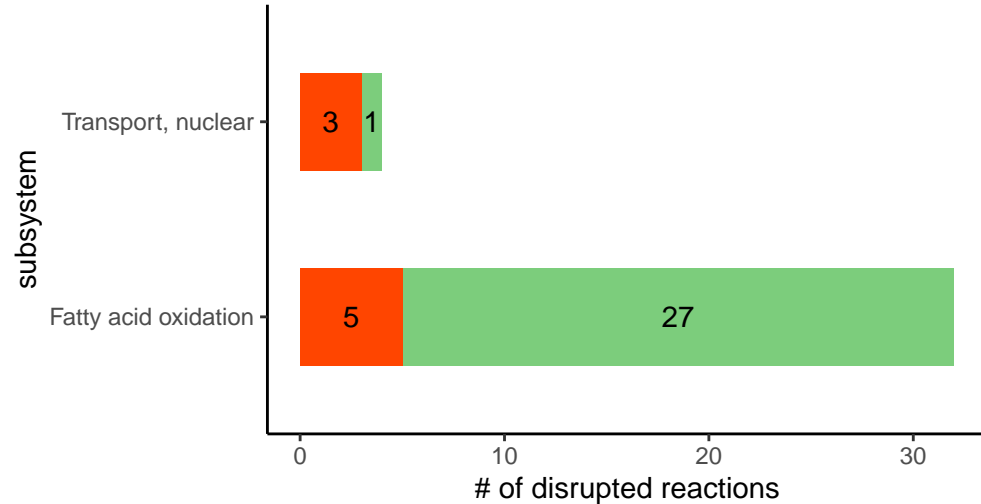
0

10

20

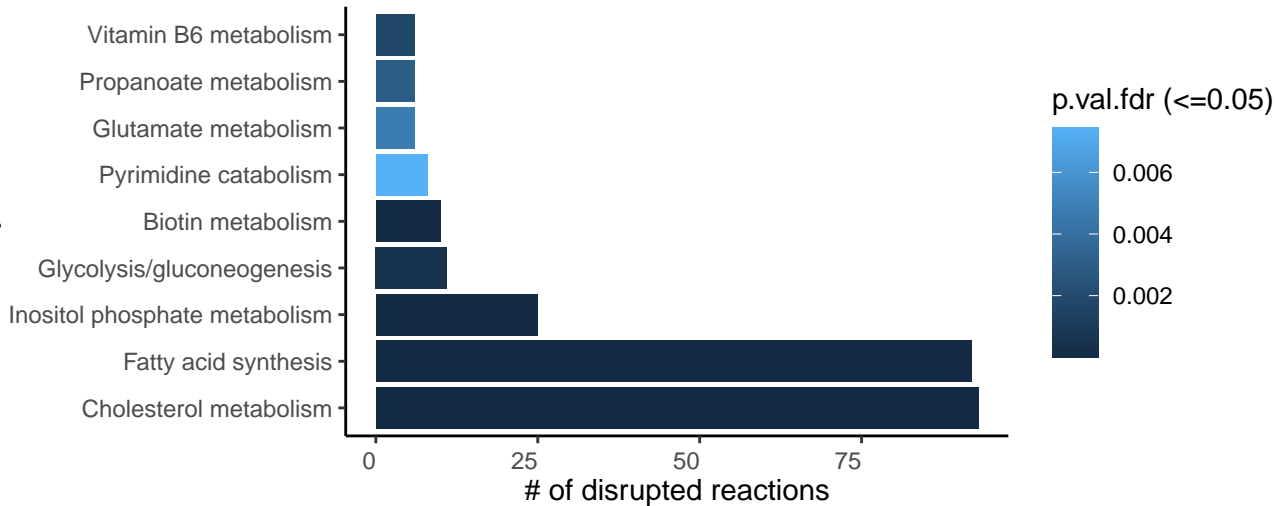
30

# of disrupted reactions



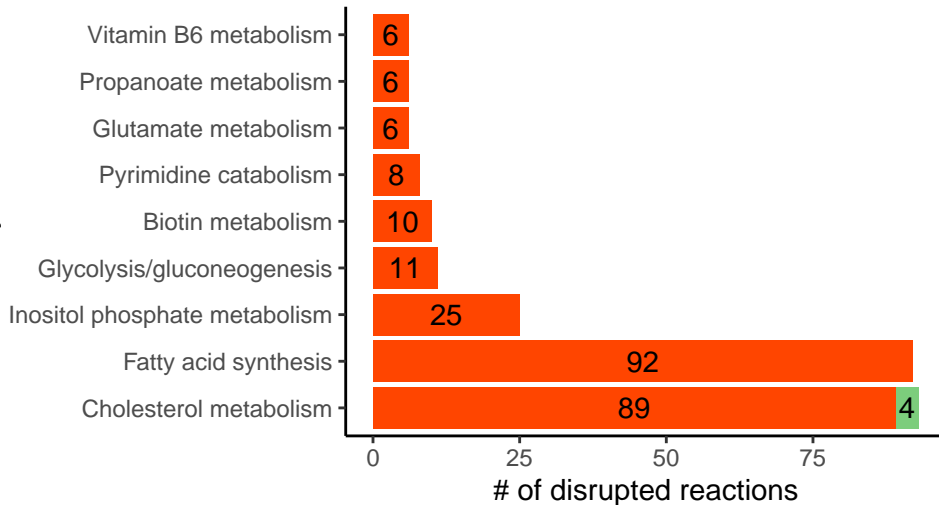
## BD\_NonResponder

subsystem



## BD\_NonResponder

subsystem



Direction of disruption



# BD\_Lumped

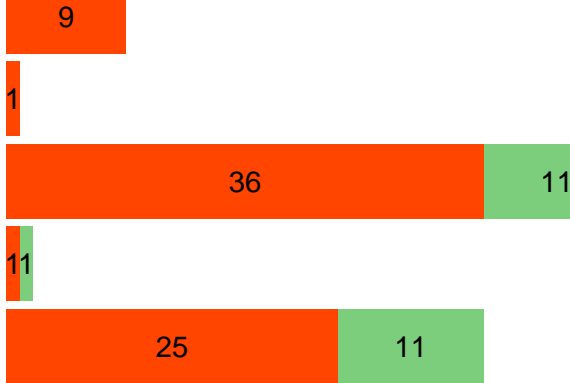
compartment

intercompartmental  
endoplasmic reticulum  
mitochondrion  
extracellular space  
cytoplasm

0 10 20 30 40

# of disrupted reactions

Direction of disruption



# BD\_Responder

compartment

intercompartmental

peroxisome

mitochondrion

cytoplasm

Direction of disruption



0

5

10

15

# of disrupted reactions

3

1

4

15

1

11

1



# BD\_NonResponder

compartment

