

REFERENCE NODE

1) Innate immunity

pdk1
pik3ca
pik3r1
src

abca1
prkca
prkcd
prkcz
ptpre
rela

cbl
foxo3
grb14
grb2

bcl10
dusp3
ptprj

CLUSTER 01-01

map2k3
map2k4
map2k7
map3k7
mapk14
mapk3
mapk8
mapkap3
mef2a
mef2c
nfkb2
ppp2cb
rela

atf2
chuk
dusp3
fos
jun

ikkbk
traf6

rps6ka3
rps6ka5
tab3

mapk2
mapk4
nfkb1
nfkb2
ngf
prkac
prkcz

ptpn11
ptpra
sorbs1

adipor1
akt1
akt2
enpp1

irs1

CLUSTER 02

mapk3
mapk8
mapkap3
mef2a
mef2c
nfkb2
ppp2cb
rela

ikkbk
traf6

rps6ka3
rps6ka5
tab3

mapk2
mapk4
nfkb1
nfkb2
ngf
prkac
prkcz

2) Insr / Igfr1 signaling

itgb4
lama3
lamb3
lamc2

col17a1
erb2
erb3
itgb1

met

CLUSTER 03-02

ctnna1
cttn
dock1
lik
igap1
jup
keap1
lama3
lims2
lpp
luc7l3
nexn
numb
pak1
pdlim7
plec
ptk2
pxn
rfwd2
scrib
sorbs1
capn1
capns1
syne2
tenc1
tjp1

rac1
src
tln1
actn1
flnb
git1
tns1
tns4

vasp
vcl
zfp384
zyx
abi1
akt1
arhgef7
pdk2
pdk1
pik3ca

3) Focal adhesion & motility

amot
anxa2
dcl1
enah
fermt2
flnb
ilk
myh11
myh14
palld
pdlim7
ptpn11
sorbs1

apc
arhgap17
ash11
cgn
cldn7
ctnna1
ctnnd1
ctnnd1
im07
map3k7
mllt4

lin7c
marveld2
micall2
mpdz
mpp5
mpp7
mtdh
ocln
pak1
ptk2

synpo
tjap1
tjp1
tjp2

actn1
actn4

actn1
actn4

actn1
actn4

actn1
actn4

actn1
actn4

actn1
actn4

tmsb15l
tpm1
tpm3
vcl
zyx

jup
plekha7
dsg2
dsp
itgb1

shroom2
shroom3

epcam
f11r
inadl
jam2

actn1
actn4

actn1
actn4

actn1
actn4

actn1
actn4

actn1
actn4

actn1
actn4

4) Cell-cell junctions & cytoskeleton organization

spna2
gja1

cdc42
cdh1

9030425e11rik

lgl1
ppp1r1a
scn1a

actn1
actn4

actn1
actn4

actn1
actn4

actn1
actn4

actn1
actn4

actn1
actn4

myo9b
plekha1
synj2
tmod3
tmsb15l
tpm1

myo6

myo6

myo6

myo6

myo6

myo6

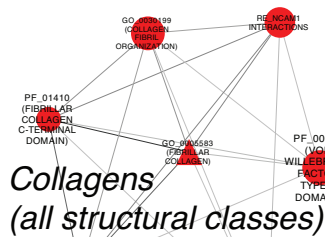
myo6

myo6

myo6

1) ECM turnover

REFERENCE NODE



Collagens (all structural classes)

Contact activation pathway (coagulation)

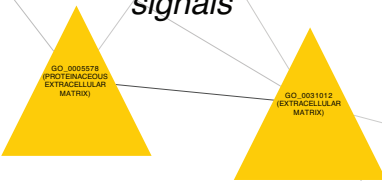
BI-INTRINSIC PATHWAY

3) Neurotransmission

Positive regulation of nerve impulses

Cys-loop receptors (all categories)

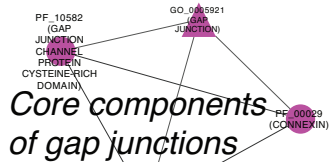
Angioinhibitory signals



Formation and structural organization of the ECM

Mmp-mediated collagenolysis

2) Gap junctions



Core components of gap junctions

A

1) ECM turnover

REFERENCE NODE

col1a1
col1a2
col2a1
col3a1

col5a1
col5a2
col5a3
col6a1
col6a2
col6a3

col4a1
col4a2
col4a3
col4a4
col4a5
col4a6
col9a1

CLUSTER 01-01

3) Neurotransmission

gria1
gria2
gria3
gria4
grid2
grik1
grik2
grik3

grik4
grik5
grin1
grin2a
grin2b
grin2c

grin2d
grin3a

CLUSTER 03

2) Gap junctions

gja10
gja5
gja8
gjb2
gjb3
gjb4
gjb5

CLUSTER 02

fbn1
fbn2
mfap2
slc1a3
thsd4

GO_0043205 (FIBRIL)

3) Neurotransmission

hmcn1
igf1
mmp9
mmp10
mmp11
mmp13
mmp14
mmp16
mmp19
mmp1a
mmp1b
mmp2
mmp20
mmp23
mmp8

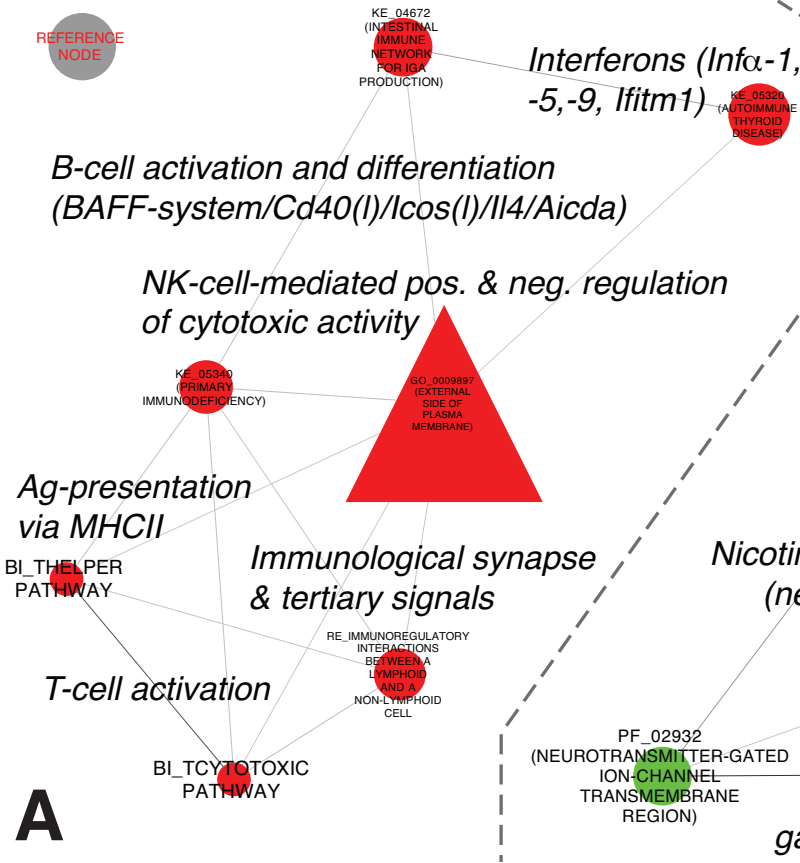
mmp9
muc2
nid1
nptn
optc
papln
pdxn
sftpd
smoc2
sparc
spock1
spon2
thbs2
thsd4
tnr
vit
wnt10a
wnt2
wnt3a
wnt9a
zfp1

ache
adams12
adams16
adams19
adams20
adams5
adams7
adams8
adams9
adams11
adams12

adams12
adams16
adams19
adams20
adams5
adams7
adams8
adams9
adams11
adams12

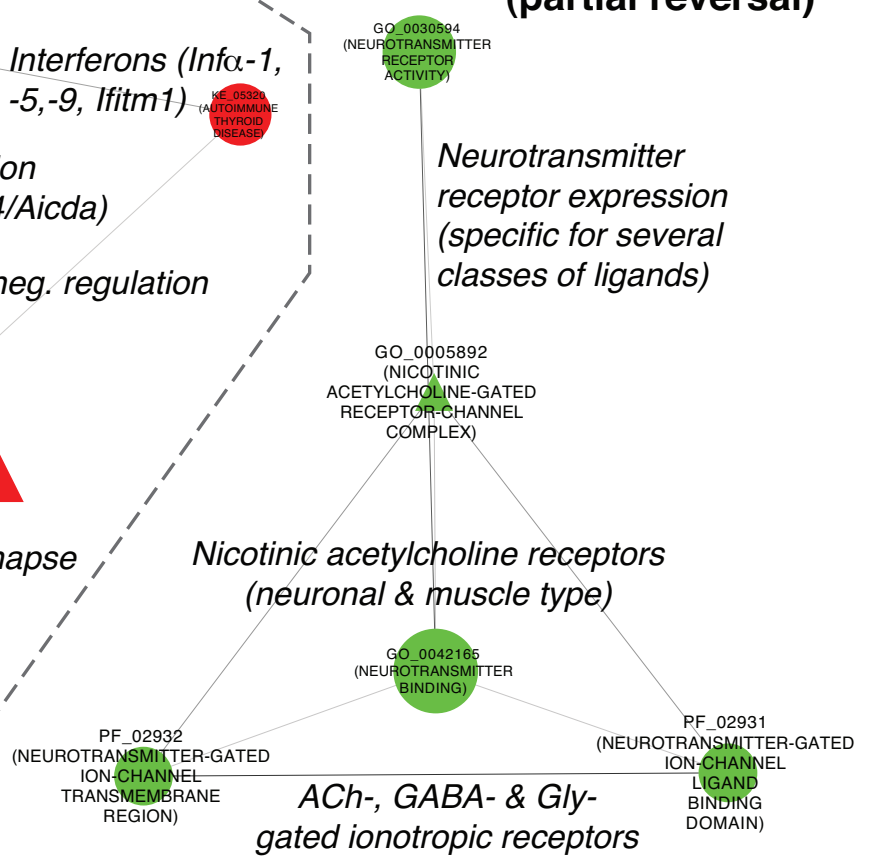
B

1) Adaptive immunity

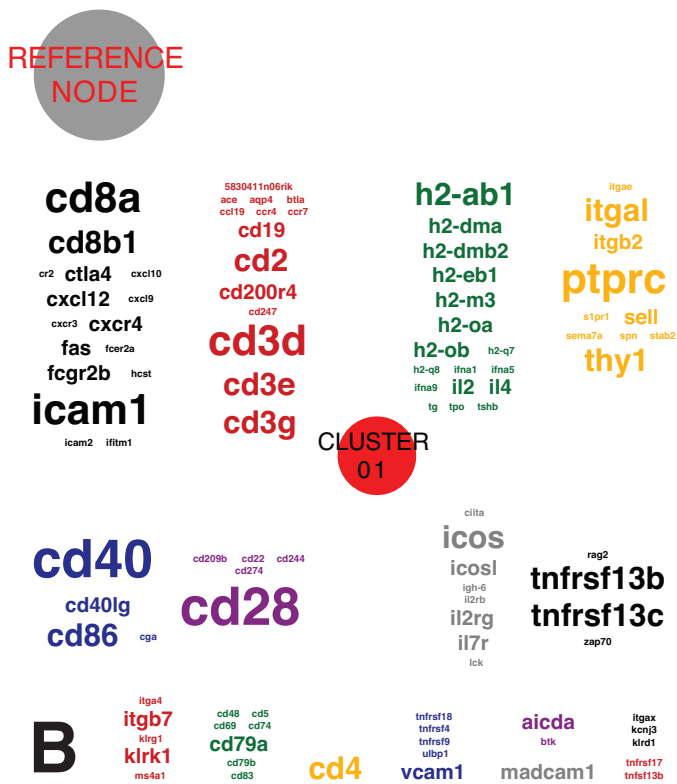


A

2) Neurotransmission (partial reversal)

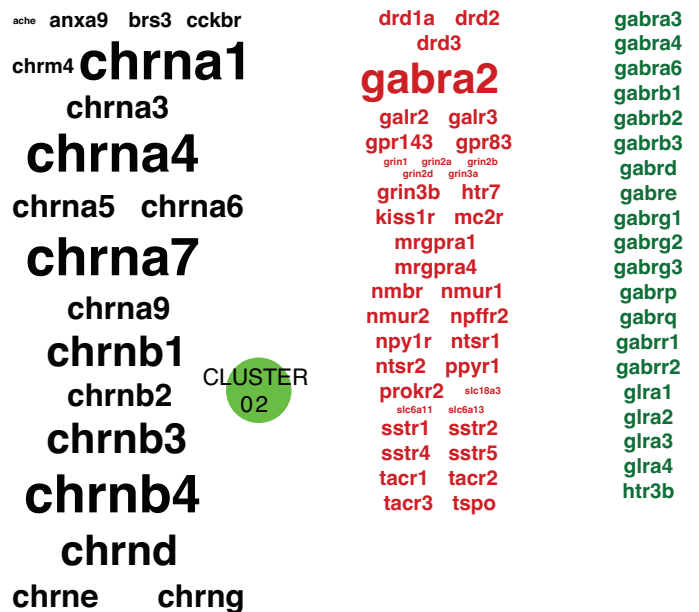


1) Adaptive immunity

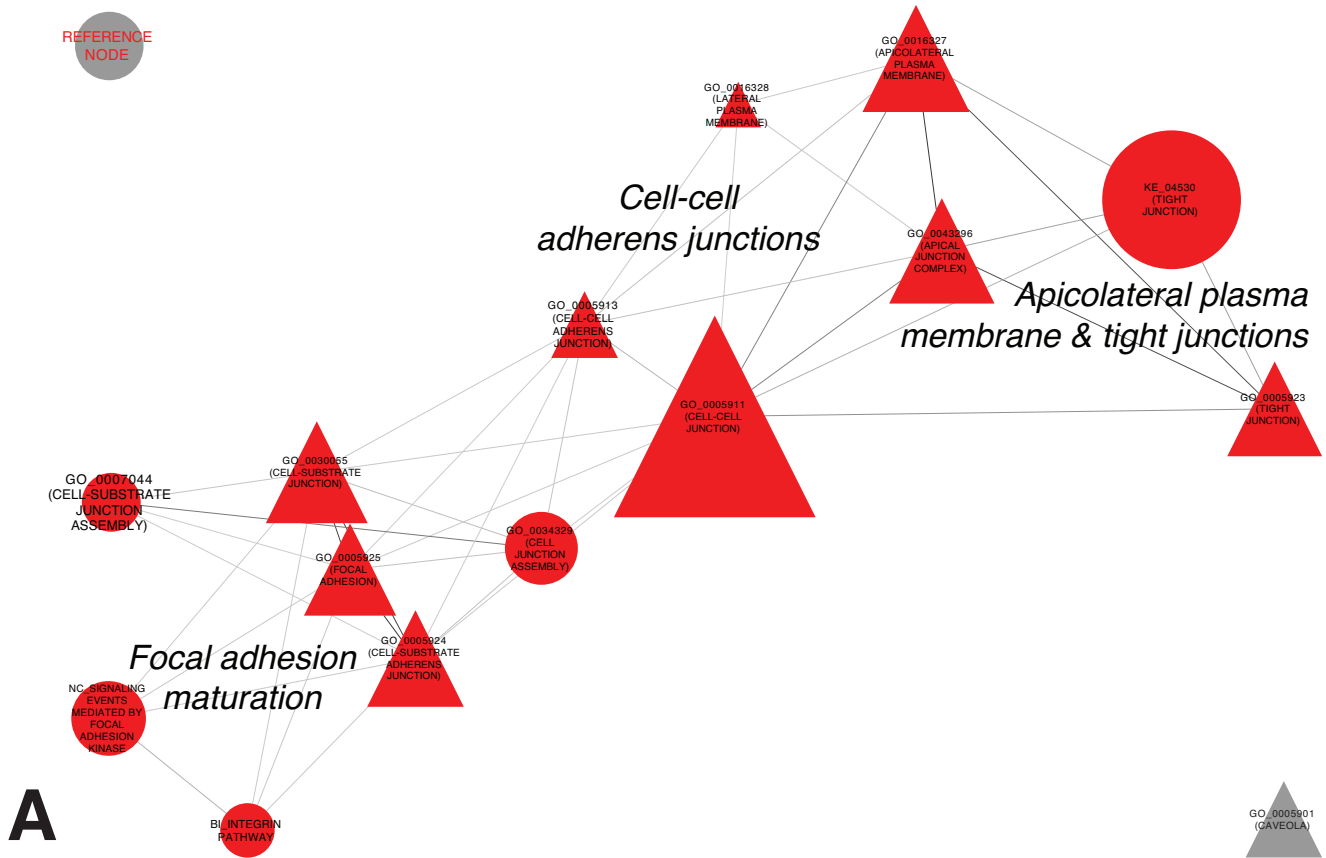


B

2) Neurotransmission (partial reversal)



1) Focal adhesion & cell-cell junctions (partial reversal)



1) Focal adhesion & cell-cell junctions (partial reversal)

