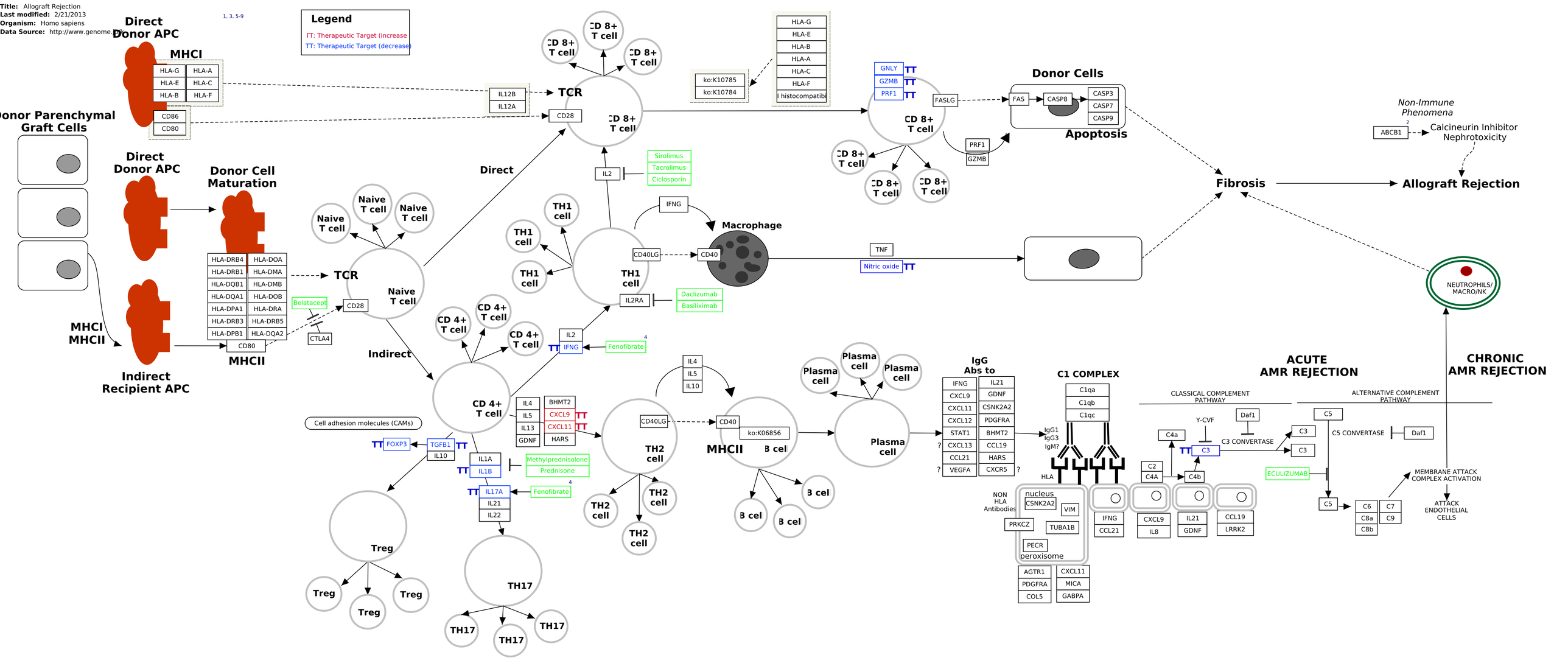
Title: Allograft Rejection
Last modified: 2/21/2013
Organism: Homo sapiens
Data Source: http://www.genome.jp/
Legend
TT: Therapeutic Target (increase
TT: Therapeutic Target (decrease)
Direct Donor APC
MHCI
HLA-G
HLA-A
HLA-E
HLA-C
HLA-B
HLA-F
CD86
CD80
Donor Parenchymal Graft Cells
Direct Donor APC
Donor Cell Maturation
MHCI MHCII
Indirect Recipient APC
HLA-DRB4
HLA-DOA
HLA-DRB1
HLA-DMA
HLA-DQB1
HLA-DMB
HLA-DQA1
HLA-DOB
HLA-DPA1
HLA-DRA
HLA-DRB3
HLA-DRB5
HLA-DPB1
HLA-DQA2
CD80
MHCII
Belatacept
CTLA4
CD28
TCR
Naive T cell
Direct
Indirect
IL12B
IL12A
CD28
TCR
CD 8+ T cell
ko:K10785
ko:K10784
HLA-G
HLA-E
HLA-B
HLA-A
HLA-C
HLA-F
GNLY
GZMB
PRF1
FASLG
Donor Cells
FAS
CASP8
CASP3
CASP7
CASP9
Apoptosis
PRF1
GZMB
IL2
Sirolimus
Tacrolimus
Ciclosporin
IFNG
Macrophage
TH1 cell
CD40LG
CD40
TNF
Nitric oxide
IL2RA
Daclizumab
Basiliximab
CD 4+ T cell
IL2
IFNG
Fenofibrate
IL4
IL5
IL10
IL4
IL5
IL13
GDNF
BHMT2
CXCL9
CXCL11
HARS
Cell adhesion molecules (CAMs)
FOXP3
TGFB1
IL10
IL1A
IL1B
IL17A
IL21
IL22
Methylprednisolone
Prednisone
Fenofibrate
Treg
TH17
TH2 cell
CD40LG
CD40
ko:K06856
MHCII
B cel
Plasma cell
IgG Abs to
IFNG
CXCL9
CXCL11
CXCL12
STAT1
CXCL13
CCL21
VEGFA
IL21
GDNF
CSNK2A2
PDGFRA
BHMT2
CCL19
HARS
CXCR5
C1 COMPLEX
C1qa
C1qb
C1qc
IgG1
IgG3
IgM?
HLA
NON HLA Antibodies
nucleus
CSNK2A2
VIM
PRKCZ
TUBA1B
PECR
peroxisome
AGTR1
CXCL11
PDGFRA
MICA
COL5
GABPA
IFNG
CCL21
CXCL9
IL8
IL21
GDNF
CCL19
LRRK2
ACUTE AMR REJECTION
CHRONIC AMR REJECTION
CLASSICAL COMPLEMENT PATHWAY
ALTERNATIVE COMPLEMENT PATHWAY
C4a
Y-CVF
Daf1
C3 CONVERTASE
C2
C4A
C4b
C3
C5
C5 CONVERTASE
ECULIZUMAB
C6
C7
C8a
C9
C8b
MEMBRANE ATTACK COMPLEX ACTIVATION
ATTACK ENDOTHELIAL CELLS
NEUTROPHILS/ MACRO/NK
Fibrosis
Non-Immune Phenomena
ABCB1
Calcineurin Inhibitor Nephrotoxicity
Allograft Rejection