

Jak1 = IFNgR and not SOCS1
 IL21 = STAT3 and NFAT
 IL18R = IL18 and IL12 and not STAT6
 SOCS1 = STAT1 or Tbet
 IL6 = RORgt
 STAT5 = IL2R
 IL17 = (RORgt and not STAT1)
 or (STAT3 and IL17 and IL23R and not STAT1 and not STAT5)
 STAT4 = IL12R and IL12 and not GATA3
 IFNgR = (IFNg_e and NFAT) or (IFNg and NFAT)
 STAT6 = IL4R and not IFNg and not SOCS1
 GATA3 = (STAT6 and NFAT and not TGFb and not RORgt and not Foxp3
 and not Tbet) or (GATA3 and not Tbet)
 or (STAT5 and not TGFb and not RORgt and not Foxp3 and not Tbet)
 IL4 = GATA3 and NFAT and not STAT1
 NFkB = IRAK and not Foxp3
 IL2 = NFAT and NFkB and not Tbet
 IL23R = (IL23 and STAT3 and not Tbet) or STAT3
 Tbet = (STAT4 and not RORgt and not Foxp3)
 or (STAT1 and not RORgt and not Foxp3)
 or (Tbet and not IL12 and not IFNg and not RORgt and not Foxp3)
 TGFbR = TGFb and NFAT
 RORgt = TGFbR and ((STAT3 and IL21R) or (STAT3 and IL6R)) and not Tbet
 and not GATA3 and not Foxp3
 IL6R = IL6 or IL6_e
 IL21R = IL21
 Foxp3 = (TGFbR and not (IL6R and STAT3) and not IL21R and not GATA3)
 or (STAT5 and not (IL6R and STAT3) and not IL21R and not GATA3)
 IRAK = IL18R
 IL12R = (IL12 and NFAT) or (STAT4 and not GATA3) or Tbet or (TCR and not GATA3)
 IL2R = IL2 and NFAT
 STAT3 = IL21R or IL23R or IL6R
 IFNg = NFkB or (STAT4 and NFkB and NFAT and not STAT3 and not STAT6)
 or (Tbet and not STAT3)
 NFAT = TCR and not Foxp3
 STAT1 = (IL27 and NFAT) or Jak1
 IL4R = (IL4 and not SOCS1) or IL4_e