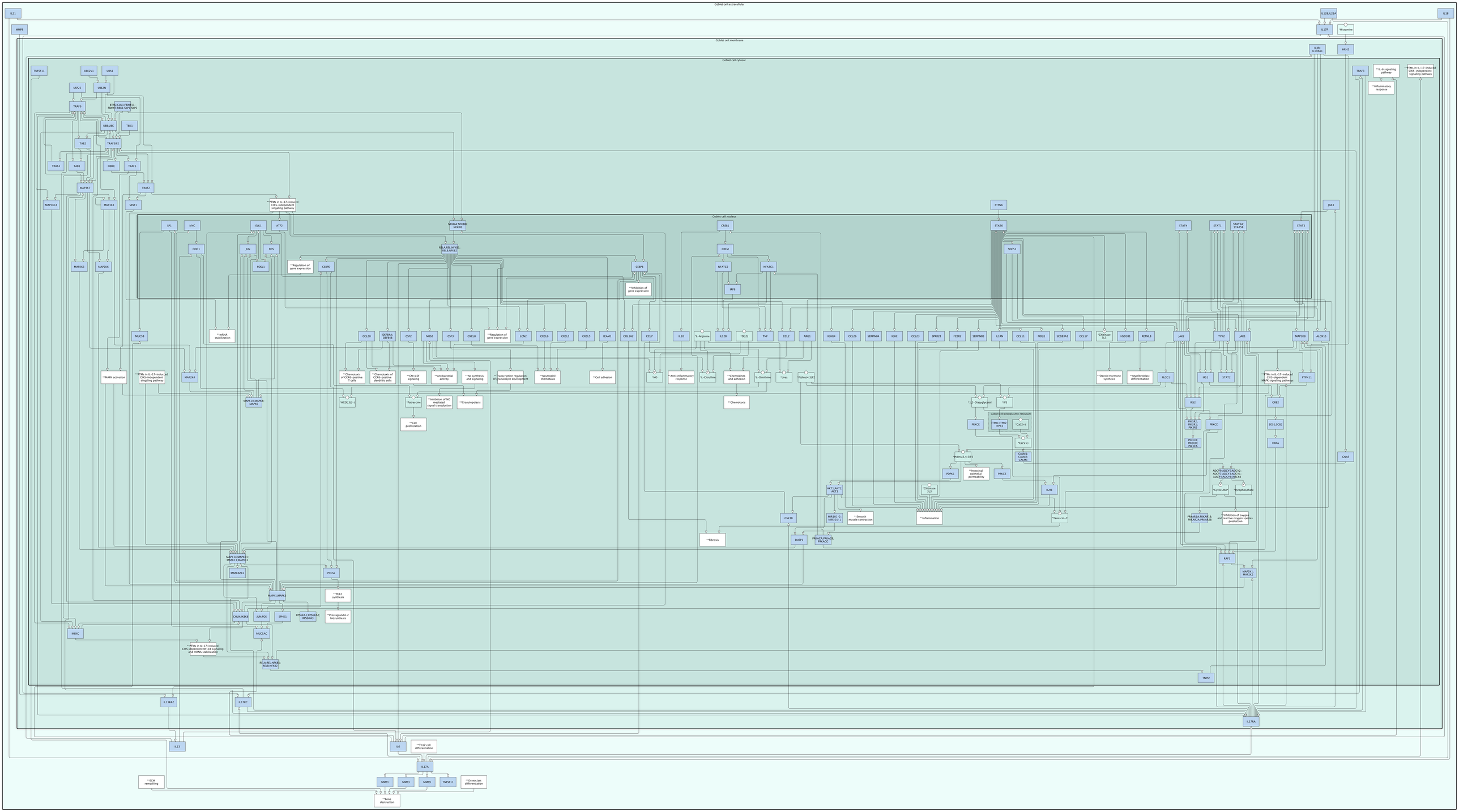

Goblet cell:extracellular
IL21
MMP8
IL12B;IL23A
IL1B
IL17F
*Histamine
Goblet cell:membrane
IL4R;
IL13RA1
HRH2
Goblet cell:cytosol
TNFSF11
UBE2V1
UBA1
USP25
UBE2N
TRAF6
BTRC;CUL1;FBXW11;
FBXW7;RBX1;SKP1;SKP2
UBB;UBC
TBK1
TAB2
TRAF3IP2
TRAF4
TAB1
IKBKE
TRAF5
MAP3K7
TRAF2
MAP3K14
MAP3K3
SRSF1
**PTMs in IL-17-induced
CIKS-independent
singaling pathway
TRAF3
**IL-6 signaling
pathway
**Inflammatory
response
**PTMs in IL-17-induced
CIKS-independent
signaling pathway
PTPN6
JAK3
Goblet cell:nucleus
SP1
MYC
ELK1
ATF2
NFKBIA;NFKBIB;
NFKBIE
CREB1
STAT6
STAT4
STAT1
STAT5A;
STAT5B
STAT3
ODC1
JUN
FOS
RELA;REL;NFKB1;
RELB;NFKB2
CREM
SOCS1
MAP2K3
MAP2K6
FOSL1
**Regulation of
gene expression
CEBPD
CEBPB
NFATC2
NFATC1
**Inhibition of
gene expression
IRF8
MUC5B
**mRNA
stabilization
CCL20
DEFB4A;
DEFB4B
CSF2
NOS2
CSF3
CXCL8
**Regulation of
gene expression
LCN2
CXCL6
CXCL1
CXCL5
ICAM1
COL1A2
CCL7
IL10
*L-Arginine
IL12B
*O(,2)
TNF
CCL2
ARG1
IGHG4
CCL26
SERPINB4
IGHE
CCL23
SPRR2B
FCER2
SERPINB3
IL1RN
CCL11
FOXJ1
SCGB3A1
CCL17
*Chitinase
3L3
HSD3B1
RETNLB
JAK2
TYK2
JAK1
MAP3K8
ALOX15
**MAPK activation
**PTMs in IL-17-inducced
CIKS-independent
singaling pathway
MAP2K4
**Chemotaxis
of CCR6-positive
T cells
**Chemotaxis of
CCR6-positive
dendritic cells
**GM-CSF
signaling
**Antibacterial
activity
**No synthesis
and signaling
**Transcription regulation
of granulocyte development
**Neutrophil
chemotaxis
**Cell adhesion
*NO
**Anti-inflammatory
response
*L-Citrulline
**Chemokines
and adhesion
*L-Ornithine
*Urea
*PtdIns(4,5)P2
**Steroid Hormone
synthesis
**Myofibroblast
differentiation
PLCG1
IRS1
STAT2
**PTMs in IL-17-induced
CIKS-dependent
MAPK signaling pathways
PTPN11
MAPK10;MAPK8;
MAPK9
*HCO(,3)('-)
*Putrescine
**Inhibition of NO
mediated
signal transduction
**Granulopoiesis
**Chemotaxis
*1,2-Diacyglycerol
*IP3
IRS2
GRB2
**Cell
proliferation
PRKCE
Goblet cell:endoplasmic reticulum
ITPR1;ITPR2;
ITPR3
*Ca('2+)
PIK3R2;
PIK3R1;
PIK3R3
PRKCD
SOS1;SOS2
*Ca('2+)
PIK3CB;
PIK3CD;
PIK3CA
HRAS
CALM1;
CALM2;
CALM3
*PtdIns(3,4,5)P3
GNAS
PDPK1
**Intestinal
epithelial
permeability
PRKCZ
ADCY9;ADCY5;ADCY2;
ADCY7;ADCY3;ADCY1;
ADCY4;ADCY6;ADCY8
AKT1;AKT2;
AKT3
*Chitinase
3L3
IGHE
*Cyclic AMP
*Pyrophosphate
GSK3B
MIR101-2;
MIR101-1
**Smooth
muscle contraction
**Inflammation
*Tenascin-C
PRKAR1A;PRKAR1B;
PRKAR2A;PRKAR2B
**Inhibition of oxygen
and reactive oxygen species
production
**Fibrosis
DUSP1
PRKACA;PRKACB;
PRKACG
RAF1
MAPK14;MAPK11;
MAPK13;MAPK12
MAP2K1;
MAP2K2
MAPKAPK2
PTGS2
MAPK1;MAPK3
**PGE2
synthesis
CHUK;IKBKB
JUN;FOS
SPHK1
RPS6KA1;RPS6KA2;
RPS6KA3
**Prostaglandin 2
biosynthesis
IKBKG
MUC5AC
**PTMs in IL-17-induced
CIKS-dependent NF-kB signaling
and mRNA stabilization
RELA;REL;NFKB1;
RELB;NFKB2
TNIP2
IL13RA2
IL17RC
IL17RA
IL13
IL6
**Th17 cell
differentiation
IL17A
**ECM
remodiling
MMP1
MMP3
MMP9
TNFSF11
**Osteoclast
differentiation
**Bone
destruction