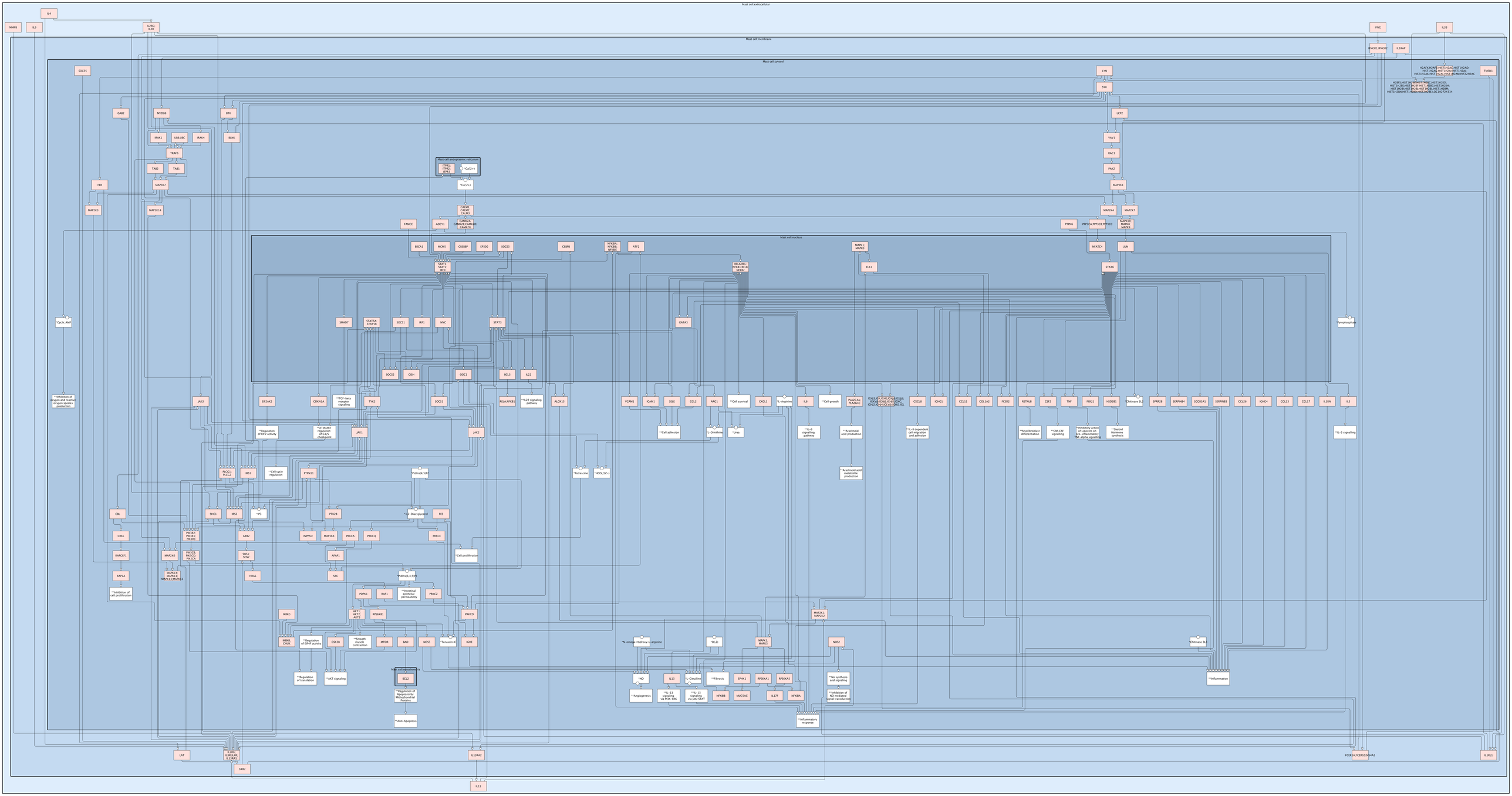

Mast cell:extracellular
IL4
MMP8
IL9
IL2RG;
IL4R
IFNG
IL33
Mast cell:membrane
IFNGR1;IFNGR2
IL1RAP
Mast cell:cytosol
SOCS5
LYN
SYK
H2AFX;H2AFZ;HIST1H2AC;HIST1H2AD;
HIST1H2AG;HIST1H2AI;HIST1H2AJ;
HIST1H2AK;HIST1H2AL;HIST1H2AM;HIST2H2AC
TMED1
H2BFS;HIST1H2BB;HIST1H2BC;HIST1H2BD;
HIST1H2BE;HIST1H2BF;HIST1H2BG;HIST1H2BH;
HIST1H2BI;HIST1H2BJ;HIST1H2BL;HIST1H2BM;
HIST1H2BN;HIST1H2BO;HIST2H2BE;LOC102724334
GAB2
MYD88
BTK
LCP2
IRAK1
UBB;UBC
IRAK4
BLNK
VAV1
TRAF6
Mast cell:endoplasmic reticulum
ITPR1;
ITPR2;
ITPR3
*Ca('2+)
RAC1
TAB2
TAB1
PAK2
FER
MAP3K7
*Ca('2+)
MAP3K1
MAP2K3
MAP3K14
CALM1;
CALM2;
CALM3
MAP2K4
MAP2K7
FANCC
ADCY1
CAMK2A;
CAMK2B;CAMK2D;
CAMK2G
PTPN6
PPP3CA;PPP3CB;PPP3CC
MAPK10;
MAPK8;
MAPK9
Mast cell:nucleus
BRCA1
MCM5
CREBBP
EP300
SOCS3
CEBPB
NFKBIA;
NFKBIB;
NFKBIE
ATF2
MAPK1;
MAPK3
NFATC4
JUN
STAT1;
STAT2;
IRF9
RELA;REL;
NFKB1;RELB;
NFKB2
ELK1
STAT6
*Cyclic AMP
SMAD7
STAT5A;
STAT5B
SOCS1
IRF1
MYC
STAT3
GATA3
*Pyrophosphate
SOCS2
CISH
ODC1
BCL3
IL22
**Inhibition of
oxygen and reactive
oxygen species
production
JAK3
EIF2AK2
CDKN1A
**TGF-beta
receptor
signaling
TYK2
SOCS1
RELA;NFKB1
**IL22 signaling
pathway
ALOX15
VCAM1
ICAM1
SELE
CCL2
ARG1
**Cell survival
CXCL1
*L-Arginine
IL6
**Cell growth
PLA2G4A;
PLA2G4C
IGHJ3;IGK;IGHE;IGKJ@;IGLJ@;
IGKV@;IGHJ6;IGHJ5;IGKC;
IGHJ2;IGHJ4;IGLV@;IGHJ1;IGL
CXCL8
IGHG1
CCL11
COL1A2
FCER2
RETNLB
CSF2
TNF
FOXJ1
HSD3B1
*Chitinase 3L3
SPRR2B
SERPINB4
SCGB3A1
SERPINB3
CCL26
IGHG4
CCL23
CCL17
IL1RN
IL5
**Regulation
of EIF2 activity
**ATM/ART
regulation
of G1/S
checkpoint
JAK1
JAK2
**Cell adhesion
*L-Ornithine
*Urea
**IL-6
signalling
pathway
**Arachnoid
acid production
**IL-8 dependent
cell migration
and adhesion
**Myofibroblast
differentiation
**GM-CSF
signalling
**Inhibitory action
of Lipoxins on
pro-inflammatory
TNF-alpha signalling
**Steroid
Hormone
synthesis
**IL-5 signalling
PLCG1;
PLCG2
IRS1
**Cell cycle
regulation
PTPN11
*PtdIns(4,5)P2
*Putrescine
*HCO(,3)('-)
**Arachnoid acid
metabolite
production
CBL
SHC1
IRS2
*IP3
PTK2B
*1,2-Diacyglycerol
FES
CRKL
PIK3R2;
PIK3R1;
PIK3R3
GRB2
INPP5D
MAP3K4
PRKCA
PRKCQ
PRKCE
**Cell proliferation
RAPGEF1
MAP2K6
PIK3CB;
PIK3CD;
PIK3CA
SOS1;
SOS2
AFAP1
RAP1A
MAPK14;
MAPK11;
MAPK13;MAPK12
HRAS
SRC
*PtdIns(3,4,5)P3
**Inhibition of
cell proliferation
PDPK1
RAF1
**Intestinal
epithelial
permeability
PRKCZ
IKBKG
AKT1;
AKT2;
AKT3
RPS6KB1
PRKCD
MAP2K1;
MAP2K2
IKBKB;
CHUK
**Regulation
of EIF4F activity
GSK3B
**Smooth
muscle
contraction
MTOR
BAD
NOS3
*Tenascin-C
IGHE
*N-omega-Hydroxy-L-arginine
*O(,2)
MAPK1;
MAPK3
NOS2
*Chitinase 3L3
**Regulation
of translation
**AKT signaling
Mast cell:mitochondria
BCL2
*NO
IL13
*L-Citrulline
**Fibrosis
SPHK1
RPS6KA1
RPS6KA5
**No synthesis
and signaling
**Inflammation
**Regulation of
Apoptosis by
Mithochondrial
Proteins
**Angiogenesis
**IL-13
signaling
via PI3K-ERK
**IL-13
signaling
via JAK-STAT
NFKBIB
MUC5AC
IL17F
NFKBIA
**Inhibition of
NO mediated
signal transduction
**Inflammatory
response
**Anti-Apoptosis
LAT
IL2RG;
IL9R;IL4R;
IL13RA1
IL13RA2
FCER1A;FCER1G;MS4A2
IL1RL1
GRB2
IL13