

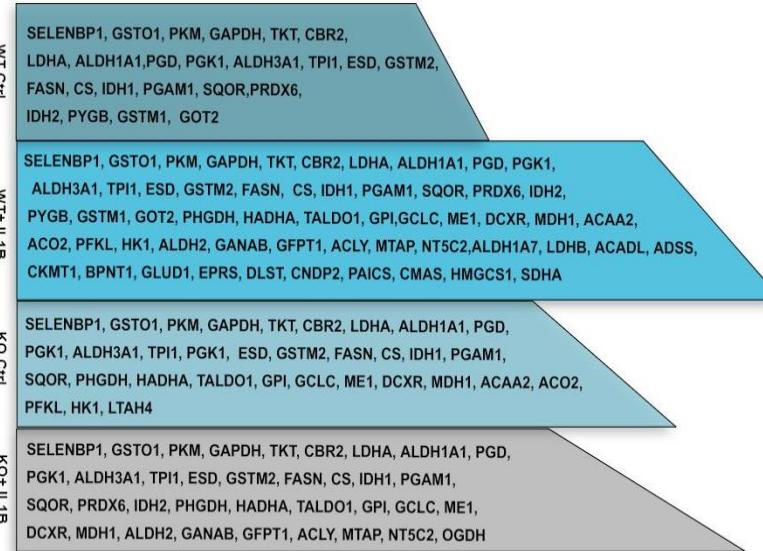
Supplementary figure 1:

A.

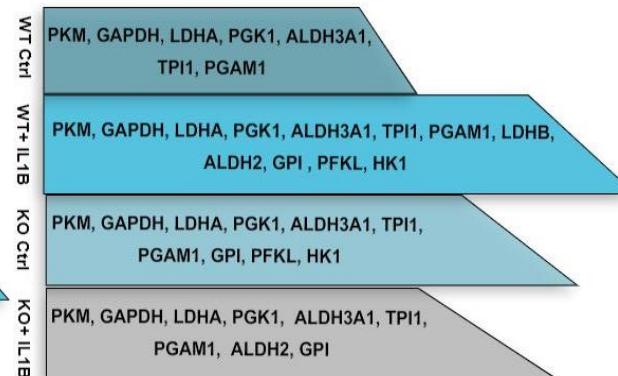
List of glutathionylated proteins

WT Ctrl	WT+ IL1B	Glx KO Ctrl	Glx KO+ IL1B
<u>MYH14, ANXA6,</u> <u>LGALS3, DLD,</u> TUBA1B, PLS3, UBE2L3, GNB2, KRT79, MYO1D, SELENBP1, GSTO1, GLRX , ACTB, PKM, GAPDH, ANXA1, ANXA2, EEF1A1, MYH9, ENO1, TKT, CBR2, LDHA, CYP2F2, ALDH1A1, VCP, PGD, PGK1, ALDH3A1, PRDX1, MDH2, PRSS1, TPI1, ESD, KRT1, KRT10, EEF2, FLNB, KRT78, ALDOA, HSP90AB1, EEF1G, ETFB, PCBP1, GSTM2, ALB, KXD1, SFN, PPIA, CSTB, RPLP0, CLIC1, RNH11, FLNA, ERO1A, CAST, VDAC3, FASN, CS, YWHAG, YWHAQ, HNRNPU, IDH1, HNRNPM, RPL12, ANXA4, KRT5, CTNND1, WDR1, HNRNPK, TAGLN2, CCT4, PGAM1, S100A6, CLTC, DSTN, GSN, SEPTIN-9, ATP5A1, KRT2, IMMT, SQOR, PRDX6, SLC25A5, OTUB1, TUBB5, VILL, IDH2, CAP1, GPD2, AHNAK, MYOF, PYGB, ATP1A1, KRT76, Gstp1, GSTM1, GOT2, AHSA1, ETFA, PCBP2	<u>TUBA1C, ALDH1A7, CFL1, LDHB, ACTN4,</u> <u>PRDX5, RHOA, RPSA, VWA5A, ACADL,</u> <u>ARF3, GNAI2, MAT2A, ADSS, RPS4X,</u> <u>GM20390, TPT1, GM10036, SERPINB5,</u> <u>ARF5, CORO1B, CKMT1, RPL30, ANXA3,</u> <u>S100A10, PEF1, TPM4, IPO5, DDB1,</u> <u>BPNT1, RAN, DARS, FAM129A, RPS3,</u> <u>RPS12, CTSC, CORO1C, ATP5O, GLUD1,</u> <u>HSPA8, AHCY, SARG, HNRNPAB, UBE2D3,</u> <u>CTSB, PIR, KHDRBS1, RPS14, EPRS, EIF3G,</u> <u>DLST, CNDP2, PAICS, IL1RN, JUP, SND1,</u> <u>HSPA5, MAP4, POR, DNPEP, STRN,</u> <u>RPS3A, CMAS, HMGCS1, SLC9A3R1,</u> <u>PDLIM1, PIGR, AFDN, VASP, S100A14,</u> <u>ATP5G2, RPL23, NEDD4, FABP5, HNRNPD,</u> <u>SERPINB9, GM5786, RBM25, RPI7A-PS3,</u> <u>SDHA, HSPD1, PSMD4, SERBP1, LTF,</u> IQGAP1, YWHAZ, PSMA6, ACTN1, ALDH2, RPS5, S100A11, CAPG, PFN1, RAB10, MTAP, EIF5A, NAP1L1, GARS, TXNL1, GFPT1, NAXE, ATXN2L, UBE2N, NDRG1, GANAB, PPP2R1A, RPS16, NT5C2, CCT7, CDC42, DHX9, SH3BGRL3, UQCRC1, ATP2A2, DYNLL1, ACLY, CAPN1, P4HB, TGM2, UBA1, DCXR, RACK1, CALR, PREP, MDH1, VDAC1, LRRFIP1, MYL6, FAM129B, VDAC2, CCT8, RHOC, PHGDH, S100A16, PDIA3, TRY5, G6PDX, HADHA, SLC25A3, GCLC, PRDX2, CCT5, HSPA9, HNRNPL, ME1, TALDO1, CNN3, CCT6A, COPB1, GPI, CLIC4, CCT3, EPHX1, RAB7A, KPNB1, HSP90AA1, TUBB4B, KRT73, TXN, EIF2S1, PEBP1, ACO2, HNRNPF, TCP1, KRT14, PFKL, TPM3, HDGF, CAPZB, ARF6, RPS20, PDCD6IP, ACAA2, CAPN2, PSMD2, NPM1, CTSD, DBNL, HK1, ACTR3, GSTP1, GDI2, RALY, HNRNPA3, ARPC1B, SELENBP1, GSTO1, GLRX , ACTB, PKM, GAPDH, ANXA1, ANXA2, EEF1A1, MYH9, ENO1, TKT, CBR2, LDHA, CYP2F2, ALDH1A1, VCP, PGD, PGK1, ALDH3A1, PRDX1, MDH2, PRSS1, TPI1, ESD, KRT1, KRT10, EEF2, FLNB, KRT78, ALDOA, HSP90AB1, EEF1G, ETFB, PCBP1, GSTM2, ALB, KXD1, SFN, PPIA, CSTB, RPLP0, CLIC1, RNH1, FLNA, ERO1A, CAST, VDAC3, FASN, CS, YWHAG, YWHAQ, HNRNPU, IDH1, HNRNPM, RPL12, ANXA4, KRT5, CTNND1, WDR1, HNRNPK, TAGLN2, CCT4, PGAM1, S100A6, CLTC, DSTN, GSN, SEPTIN-9, ATP5A1, KRT2, IMMT, SQOR, PRDX6, SLC25A5, OTUB1, TUBB5, VILL, IDH2, CAP1, GPD2, AHNAK, MYOF, PYGB, ATP1A1, KRT76, Gstp1, GSTM1, GOT2, AHSA1, ETFA, PCBP2	<u>ACTC1, NIPSNAP3A, EIF4B,</u> <u>LTA4H, ESPN, LASP1,</u> <u>CTNNA1, ERP44, NME1,</u> CTSH, PARK7, CTNNB1, PSMD1, HIST2H3C1, P4HB, TGM2, UBA1, DCXR, RACK1, CALR, PREP, MDH1, VDAC1, LRRFIP1, MYL6, FAM129B, VDAC2, CCT8, RHOC, PHGDH, S100A16, PDIA3, TRY5, G6PDX, HADHA, SLC25A3, GCLC, PRDX2, CCT5, HSPA9, HNRNPL, ME1, TALDO1, CNN3, CCT6A, COPB1, GPI, CLIC4, CCT3, EPHX1, RAB7A, KPNB1, HSP90AA1, TUBB4B, KRT73, TXN, EIF2S1, PEBP1, ACO2, HNRNPF, TCP1, KRT14, PFKL, TPM3, HDGF, CAPZB, ARF6, RPS20, PDCD6IP, ACAA2, CAPN2, PSMD2, NPM1, CTSD, DBNL, HK1, ACTR3, GSTP1, GDI2, RALY, HNRNPA3, ARPC1B, TUBA1B, PLS3, UBE2L3, GNB2, KRT79, MYO1D, SELENBP1, GSTO1, GLRX , ACTB, PKM, GAPDH, ANXA1, ANXA2, EEF1A1, MYH9, ENO1, TKT, CBR2, LDHA, CYP2F2, ALDH1A1, VCP, PGD, PGK1, ALDH3A1, PRDX1, MDH2, PRSS1, TPI1, ESD, KRT1, KRT10, EEF2, FLNB, KRT78, ALDOA, HSP90AB1, EEF1G, ETFB, PCBP1, GSTM2, ALB, KXD1, SFN, PPIA, CSTB, RPLP0, CLIC1, RNH1, FLNA, ERO1A, CAST, VDAC3, FASN, CS, YWHAG, YWHAQ, HNRNPU, IDH1, HNRNPM, RPL12, ANXA4, KRT5, CTNND1, WDR1, HNRNPK, TAGLN2, CCT4, PGAM1, S100A6, CLTC, DSTN, GSN, SEPTIN-9, ATP5A1, KRT2, IMMT, SQOR, AHNAK, MYOF, PYGB, ATP1A1, KRT76, Gstp1	<u>CNN2, DNM2, PPP1CC, PCLO,</u> <u>MIER1, USP14, OGDH,</u> <u>MYO1C, HNRNPC, CCT2,</u> <u>PPP2CB, BAG3, XPO1, RPL5,</u> <u>LMNB1, AP2M1, SEC24C,</u> <u>RBBP4, NARS, LTF, IQGAP1,</u> YWHAZ, PSMA6, ACTN1, ALDH2, RPS5, S100A11, CAPG, PFN1, RAB10, MTAP, EIF5A, NAP1L1, GARS, TXNL1, GFPT1, NAXE, ATXN2L, UBE2N, NDRG1, GANAB, PPP2R1A, RPS16, NT5C2, CCT7, CDC42, DHX9, SH3BGRL3, UQCRC1, ATP2A2, DYNLL1, ACLY, CAPN1, PRDX6, SLC25A5, OTUB1, TUBB5, VILL, IDH2, CAP1, GPD2, CTSH, PARK7, CTNNB1, PSMD1, HIST2H3C1, KRT79, MYO1D, P4HB, TGM2, UBA1, DCXR, RACK1, CALR, PREP, MDH1, VDAC1, LRRFIP1, MYL6, FAM129B, VDAC2, CCT8, RHOC, PHGDH, S100A16, PDIA3, TRY5, G6PDX, HADHA, SLC25A3, GCLC, PRDX2, CCT5, HSPA9, HNRNPL, ME1, TALDO1, CNN3, CCT6A, COPB1, GPI, CLIC4, CCT3, EPHX1, RAB7A, KPNB1, SELENBP1, GSTO1, GLRX , ACTB, PKM, GAPDH, ANXA1, ANXA2, EEF1A1, MYH9, ENO1, TKY, CBR2, LDHA, CYP2F2, ALDH1A1, VCP, PGD, PGK1, ALDH3A1, PRDX1, MDH2, PRSS1, TPI1, ESD, KRT1, KRT10, EEF2, FLNB, KRT78, ALDOA, HSP90AB1, EEF1G, ETFB, PCBP1, GSTM2, ALB, KXD1, SFN, PPIA, CSTB, RPLP0, CLIC1, RNH1, FLNA, ERO1A, CAST, VDAC3, FASN, CS, YWHAG, YWHAQ, HNRNPU, IDH1, HNRNPM, RPL12, ANXA4, KRT5, CTNND1, WDR1, HNRNPK, TAGLN2, CCT4, PGAM1, S100A6, CLTC, DSTN, GSN, SEPTIN-9, ATP5A1, KRT2, IMMT, SQOR

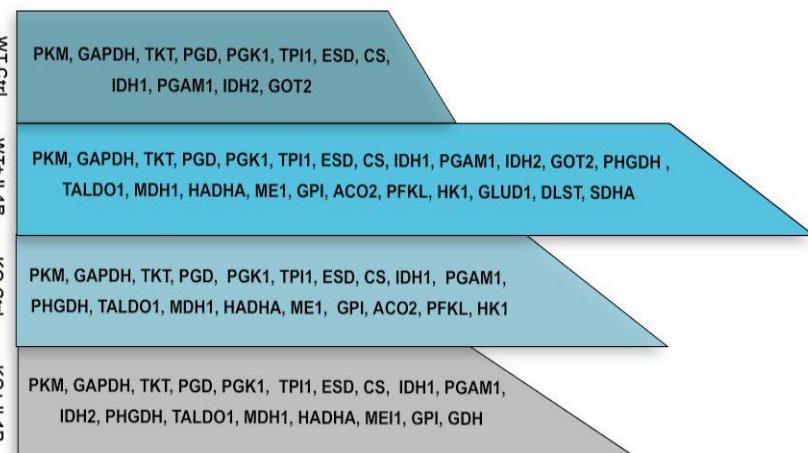
B. Metabolic pathways



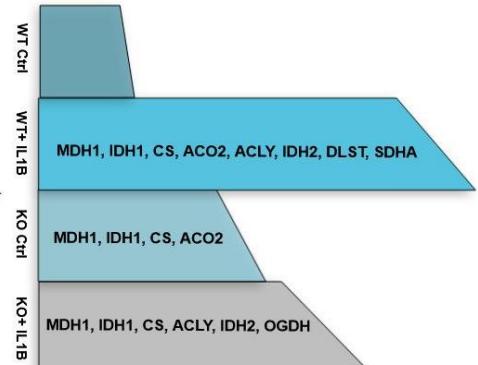
Glycolysis/ gluconeogenesis



Carbon metabolism



TCA cycle



Supplementary Figure 1: S-glutathionylated proteins identified via redox-proteomic analysis of WT or *Glxr*^{-/-} airway basal cells under baseline conditions or in response to stimulation with IL1B

A: Glutathionylated proteins appearing in control or IL1B-stimulated WT or *Glxr*^{-/-} airway basal cells. Unique proteins detected in each group are in bold and underlined. Exogenously added GLRX identified in the four groups is highlighted in red. **B:** Identity of glutathionylated proteins hits appearing in select KEGG pathways identified in Figure 1C in each of the four treatment groups.