

SUPPLEMENTAL TABLES AND FIGURES

Supplemental Table 1 CyDye labeling of protein samples from NIT-1 and α TC-1

	Cy3	Cy5	Cy2
Batch 1			
Gel 1	NIT-1	α TC-1	Internal Std
Gel 2	NIT-1+IFN- γ + IL-1 β	NIT-1+IFN- γ +TNF- α	Internal Std
Gel 3	α TC-1+IFN- γ + IL-1 β	α TC-1+IFN- γ +TNF- α	Internal Std
Batch 2			
Gel 4	α TC-1	NIT-1	Internal Std
Gel 5	NIT-1+IFN- γ +TNF- α	NIT-1+IFN- γ +IL-1 β	Internal Std
Gel 6	α TC-1+IFN- γ +TNF- α	α TC-1+IFN- γ + IL-1 β	Internal Std
Batch 3			
Gel 7	α TC-1	NIT-1	Internal Std
Gel 8	NIT-1+IFN- γ +TNF- α	NIT-1+IFN- γ +IL-1 β	Internal Std
Gel 9	α TC-1+IFN- γ +TNF- α	α TC-1+IFN- γ + IL-1 β	Internal Std

Supplemental Table 2 CyDye labeling of protein samples from subcellular fractionation of islets

	Cy3	Cy5	Cy2
Cytosol			
Gel 1	Islets	Islets+IFN- γ	Internal Std
Gel 2	Islets+IFN- γ +TNF- α +IL-1 β		Internal Std
Membrane/organelle			
Gel 1	Islets	Islets+IFN- γ	Internal Std
Gel 2		Islets+IFN- γ +TNF- α +IL-1 β	Internal Std
Nuclear			
Gel 1	Islets+IFN- γ	Islets	Internal Std
Gel 2	Islets+IFN- γ +TNF- α +IL-1 β		Internal Std

Supplemental table 3: NIT-1 proteome

Supplemental table 4: α TC-1 proteome

Supplemental table 5: Differentially expressed proteins in cytokine treated NIT-1

Supplemental table 6: Differentially expressed proteins in cytokine treated α TC-1

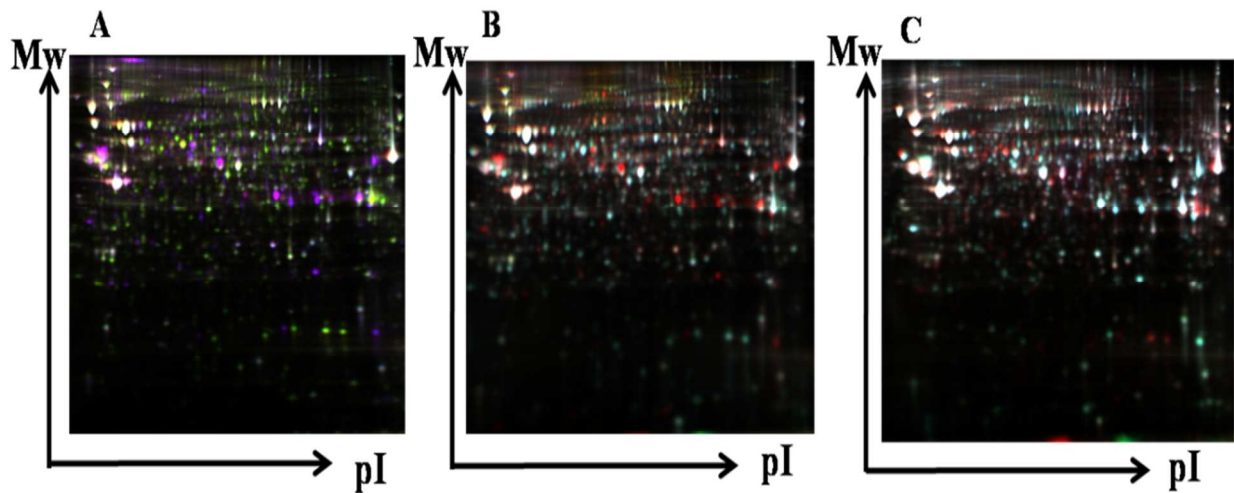
Supplemental table 7: Islets proteome- cytosol

Supplemental table 8: Islets proteome- membrane/organelle

Supplemental table 9: Islets proteome- nuclear

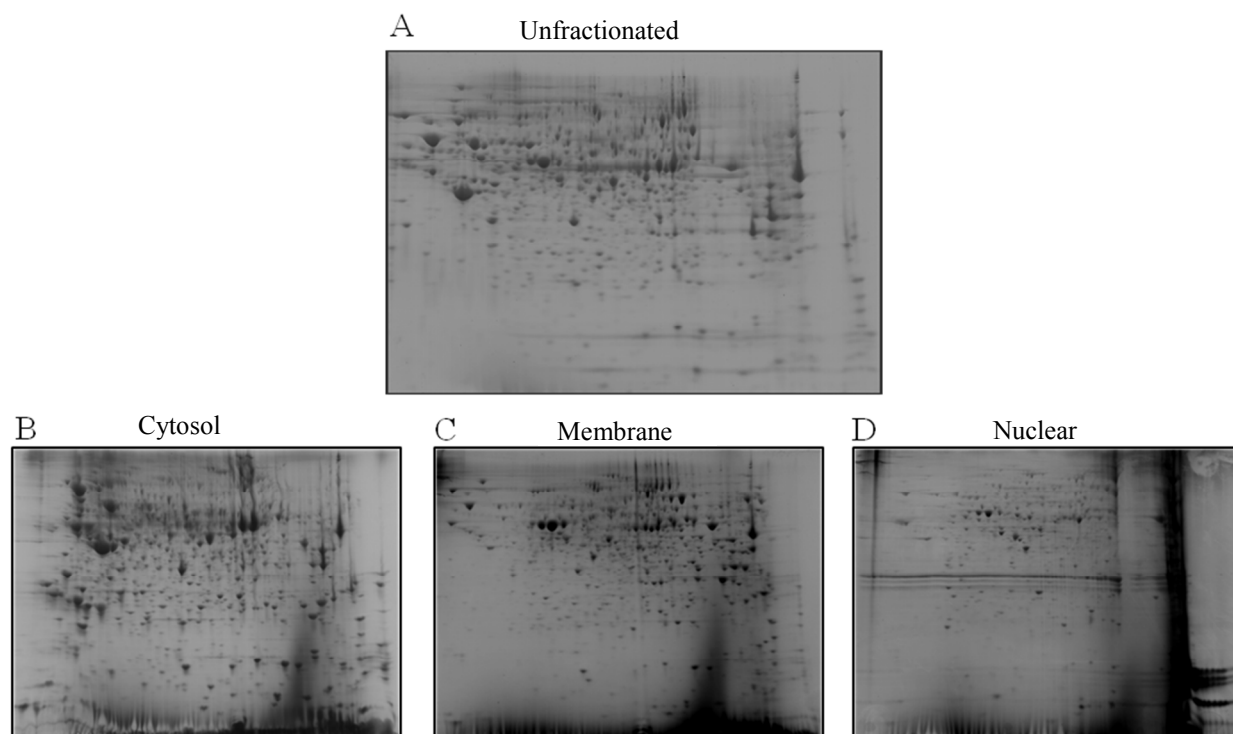
Supplemental table 10: Differentially expressed proteins in cytokine treated islets- cytosol

Supplemental table 11: Differentially expressed proteins in cytokine treated islets- membrane



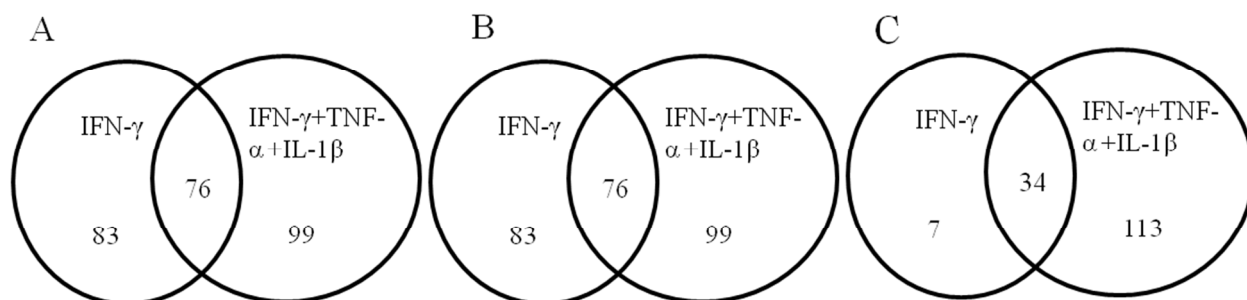
Supplemental Fig 1: Overlay of 2D DIGE images from cytokine treated NIT-1 and α TC-1

Each gel contained 150 μ g of protein lysate. 50 μ g of samples were labelled with either Cy3 or Cy5 Dye and 50 μ g of internal standard was labelled with Cy2. Cy3, Cy5 and Cy2 labelled samples were pooled together and run on a single IEF gel followed by second dimension SDS PAGE. The gels were then scanned using 3 different lasers to give 3 different images of Cy3, Cy5 and Cy2. The gels in the figure show overlaid images of Cy3, Cy5 and Cy2. (A) NIT-1 and α TC-1, (B) NIT-1+IFN- γ +IL-1 β and NIT-1+IFN- γ +TNF- α , (C) α TC-1+IFN- γ +IL-1 β and α TC-1+IFN- γ +TNF- α .



Supplemental Fig 2: 2-D gels of islets subcellular fractions

Subcellular fractionation on islets was performed using a commercially available kit (Calbiochem). Proteins from 3 fractions were precipitated using TCA plus DOC and 2-D gel electrophoresis was performed on the fractions and on whole islets protein lysates. The gels were stained with Coomassie blue (A) unfractionated islets, (B) cytosol fraction, (C) membrane/organelle and (D) nuclear fraction.



Supplemental Fig 3: Number of proteins changed in islets subjected to different cytokine treatments

Venn diagram showing the number of proteins changed after exposure to IFN- γ and IFN- γ +TNF- α +IL-1 β for 24 hrs. The diagram shows proteins regulated by IFN- γ alone, or IFN- γ +TNF- α +IL-1 β or both. (A) cytosol, (B) membrane/organelle, (C) nucleus.