Supplemental Figure Legends

Supplemental Figure 1. Knockdown of Akt 1 and 2 but not 3 in INS-1 β-cells. INS-1 cells were transfected with scramble (200 nM) or Akt 1&2 (100 nM each) siRNA as described in the methods and experiments performed 72 h later. Western analysis was performed on total cell lysates with indicated antibodies. Shown are representative blots of 3 independent experiments. Anti-β-actin blot was an internal control.

Supplemental Figure 2. Inhibitors of p38 MAPK and JNK suppress STS-induced INS-1 cell death in a concentration dependent manner. INS-1 cells were treated without or with STS (100 nM) ± increasing concentrations (0.5 μM – 10 μM) of p38 MAPK inhibitors (SB 203580 or SB 202190) or JNK inhibitors (SP600125 or JNK Inhibitor VIII) for 6 h and cell death determined. Mean ± SEM of cell death (n=4); #, $p < 0.05$ vs STS only.

Supplemental Figure 3. GIP promotes survival of STS treated MIN6 cells via suppression of p38 MAPK and JNK. *A*, MIN6 cells were treated without or with STS (500 nM) ± 10 nM GIP for 6 h and cell death determined. Mean ± SEM (n=4); #, $p < 0.05$ as indicated. *B*, MIN6 cells were treated without or with STS (500 nM) ± 10 nM GIP for 4 h and Western analysis performed on total cell lysates with indicated antibodies. *C*, MIN6 cells were treated without or with STS ± p38 MAPK inhibitor (p38i; 5μM SB 203580) and JNK inhibitor (JNKi; 5μM SP600125) for 6 h and cell death determined. Mean ± SEM of cell death (n=4); #, $p < 0.05$ as indicated. *D*, MIN6 cells were treated without or with STS (500 nM) ± p38 MAPK inhibitor (p38i; 5μM SB 203580) and JNK inhibitor (JNKi; 5μM SP600125) for 4 h and Western analysis performed on total cell lysates with indicated antibodies. Shown in *B* and *D* are representative blots of 4 independent experiments. Anti-β-actin blot was an internal control.

Figure S1.

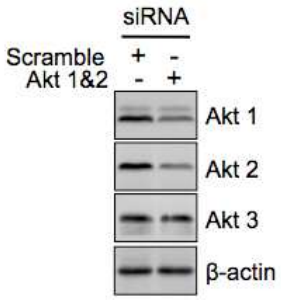


Figure S2.

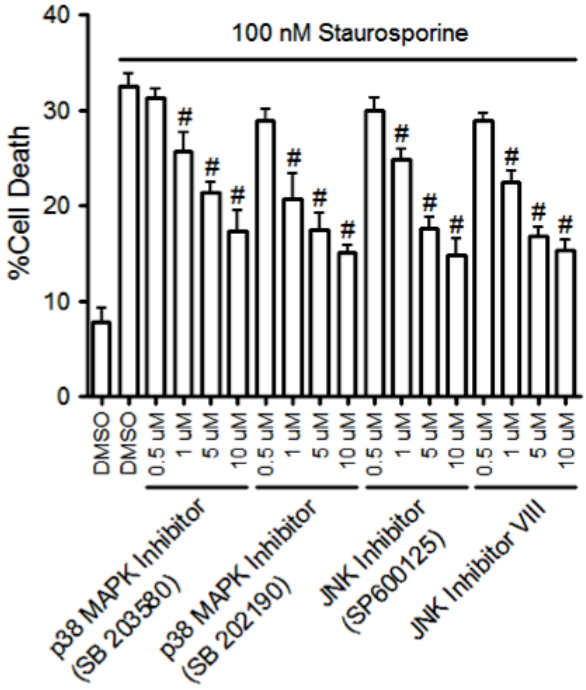
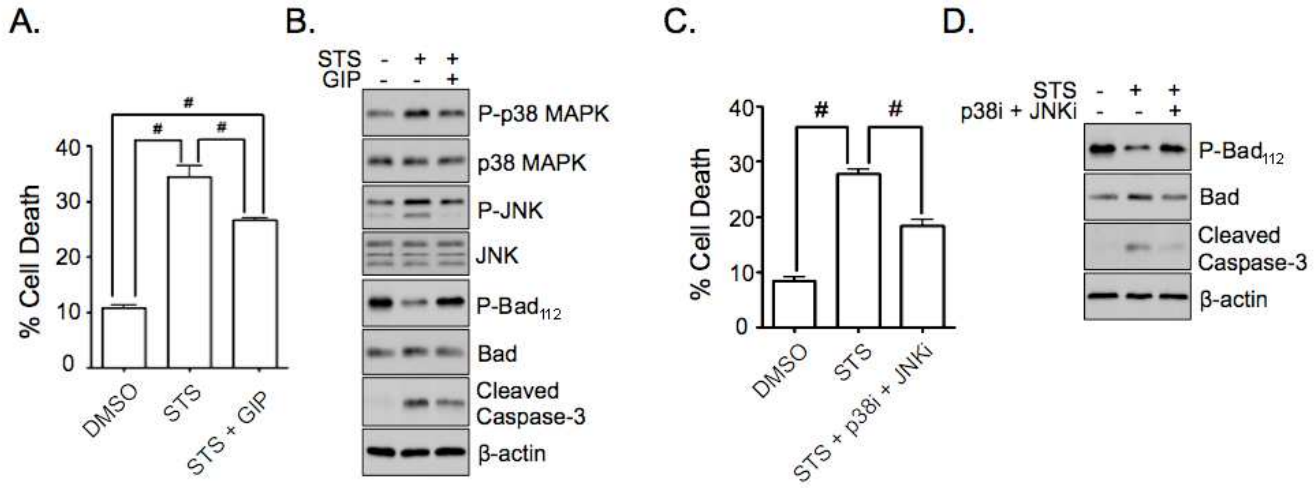

100 nM Staurosporine
%Cell Death
40
30
20
10
0
DMSO
DMSO
0.5 uM
1 uM
5 uM
10 uM
p38 MAPK Inhibitor (SB 203580)
p38 MAPK Inhibitor (SB 202190)
JNK Inhibitor (SP600125)
JNK Inhibitor VIII
#

Figure S3.


A.
B.
C.
D.
% Cell Death
40
30
20
10
0
#
#
#
DMSO
STS
STS + GIP
STS - + +
GIP - - +
P-p38 MAPK
p38 MAPK
P-JNK
JNK
P-Bad112
Bad
Cleaved Caspase-3
β-actin
% Cell Death
40
30
20
10
0
#
#
DMSO
STS
STS + p38i + JNKi
STS - + +
p38i + JNKi - - +
P-Bad112
Bad
Cleaved Caspase-3
β-actin