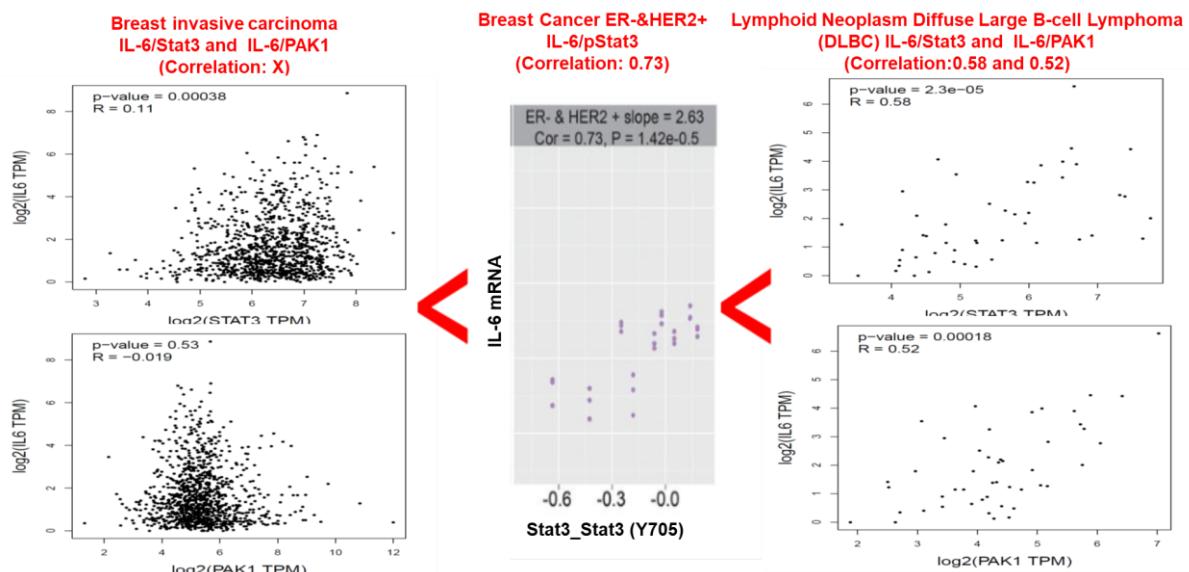


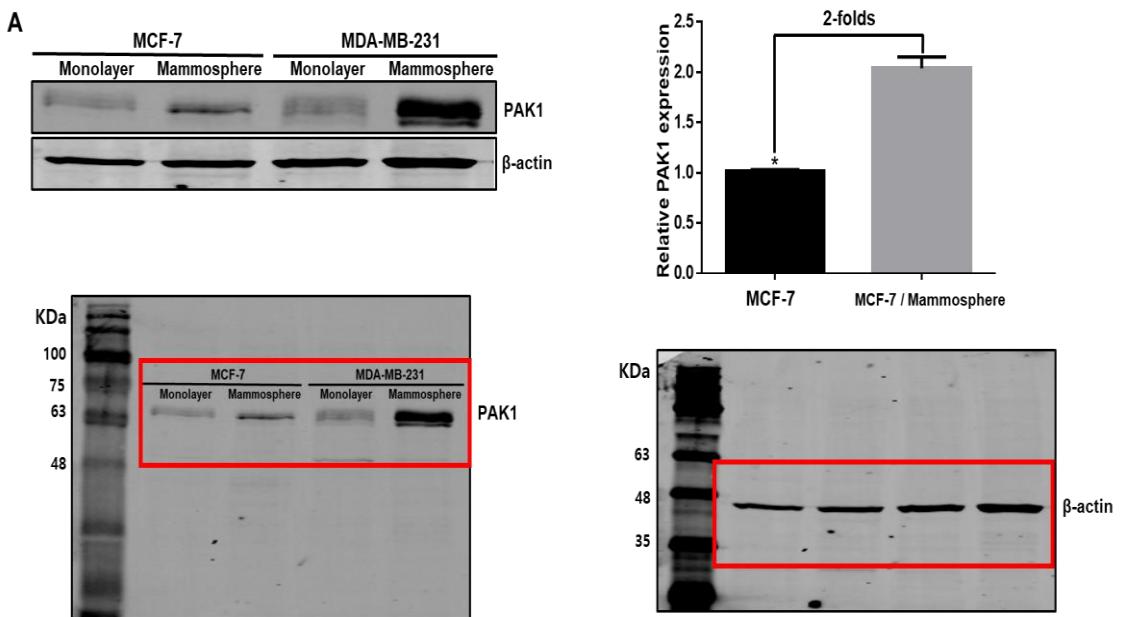
## Supplementary Materials

**Table S1.** Specific primer sequence of Real-time RT-PCR.

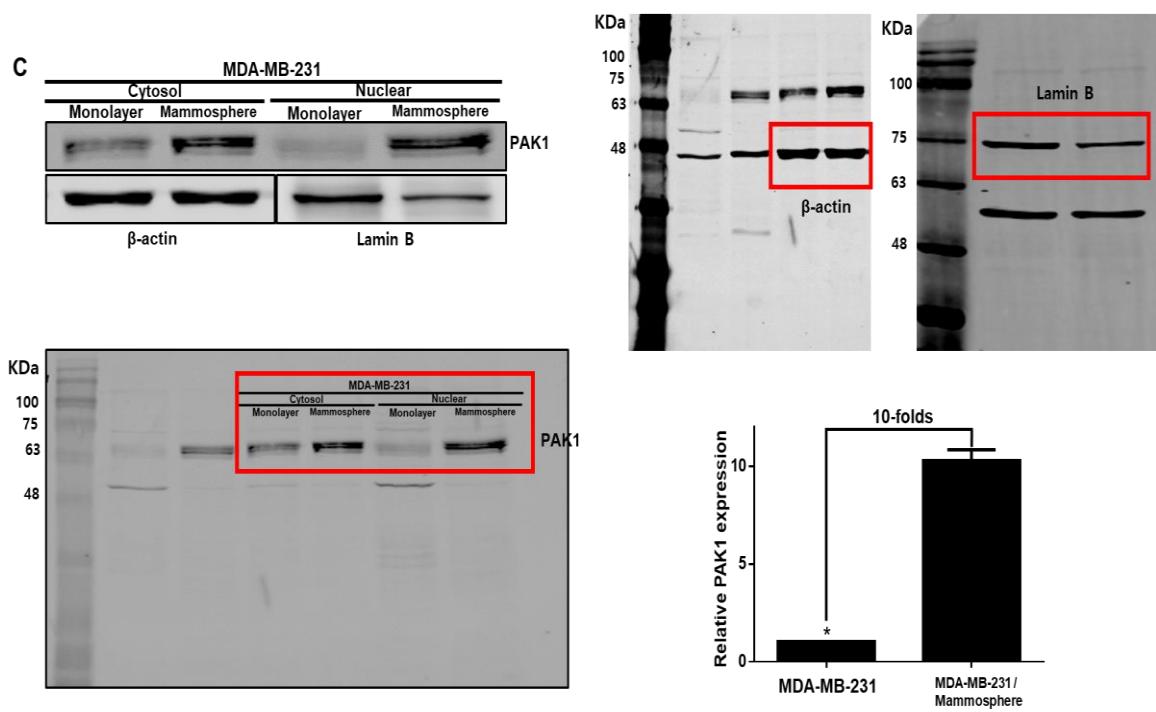
Genes	Primers
IL-6	Forward: 5'- AGACAGCCACTCACCTCTTCAG Reverse: 5'- TTCTGCCAGTGCGATGCTAAAG
ChIP and Re-ChIP	Forward: 5'-GTTGTGTCTTGCAGATGCTAAAG
IL-6	Reverse: 5'-GCTTCTCTTCGTTCCGGTG
CD44	Forward: 5'-AGAAGGTGTGGCAGAAGAA-3' Reverse: 5'-AAATGCACCATTTCCTGAGA-3'
Nanog	Forward: 5'-ATGCCTCACACGGAGACTGT-3' Reverse: 5'-AAGTGGGTTGTTGCCTTG-3'
C-myc	Forward: 5'-AATGAAAAGGCCCAAGGTAGTTATCC-3' Reverse : 5'-AGCAAACCCGGAGGAGT-3'
Sox2	Forward : 5'-TTGCTGCCCTTTAACACTAGGA-3' Reverse : 5'-CTGGGGCTCAAACCTCTCTC-3'
Oct4	Forward: 5'-AGCAAAACCCGGAGGAGT-3'-3' Reverse: 5'-CCACATCGGCCTGTGTATATC-3'
$\beta$ -actin	Forward: 5'-TGTTACCAACTGGGACGACA-3' Reverse : 5'-GGGGTGTGAAGGTCTCAA-3'



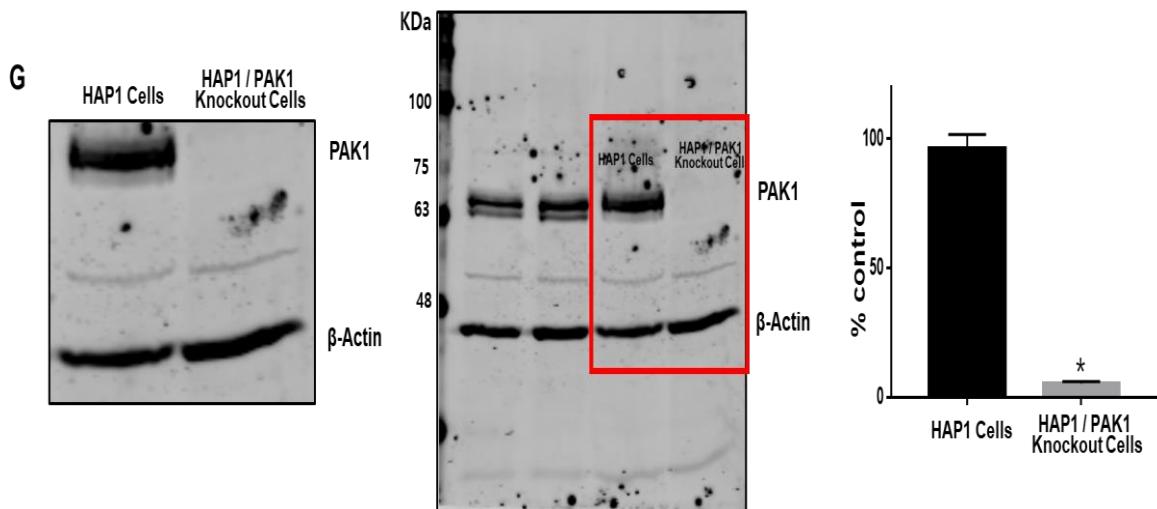
**Figure S1.** Correlation of Stat3/IL-6 and PAK1/IL6 in breast invasive carcinoma, breast cancer ER-&HER2+, and lymphoid neoplasm diffuse large B-cell lymphoma. Breast invasive carcinoma showed no correlation of IL-6/Stat3 and IL-6/PAK1. Breast cancer ER-&HER2+ showed that correlation of IL-6/pStat3 is 0.73. Lymphoid neoplasm diffuse large B-cell lymphoma showed that: correlation of IL-6/Stat3 and IL-6/PAK1 were 0.58 and 0.52.



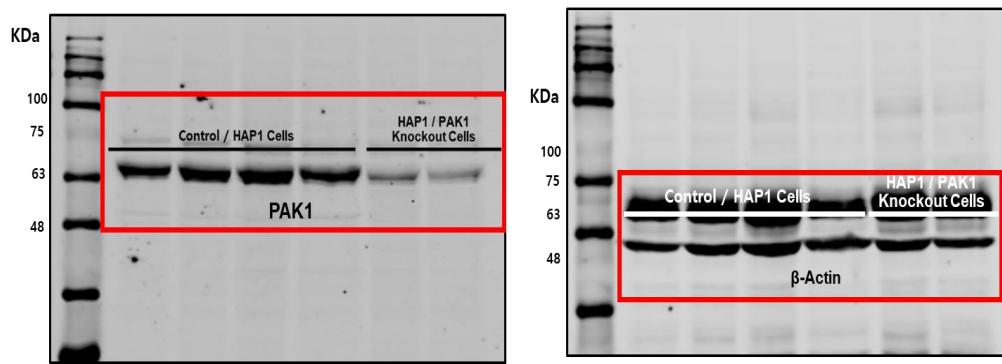
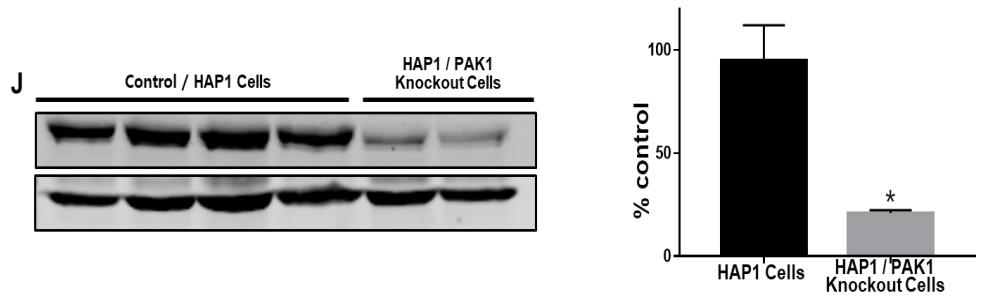
**Figure 1A**



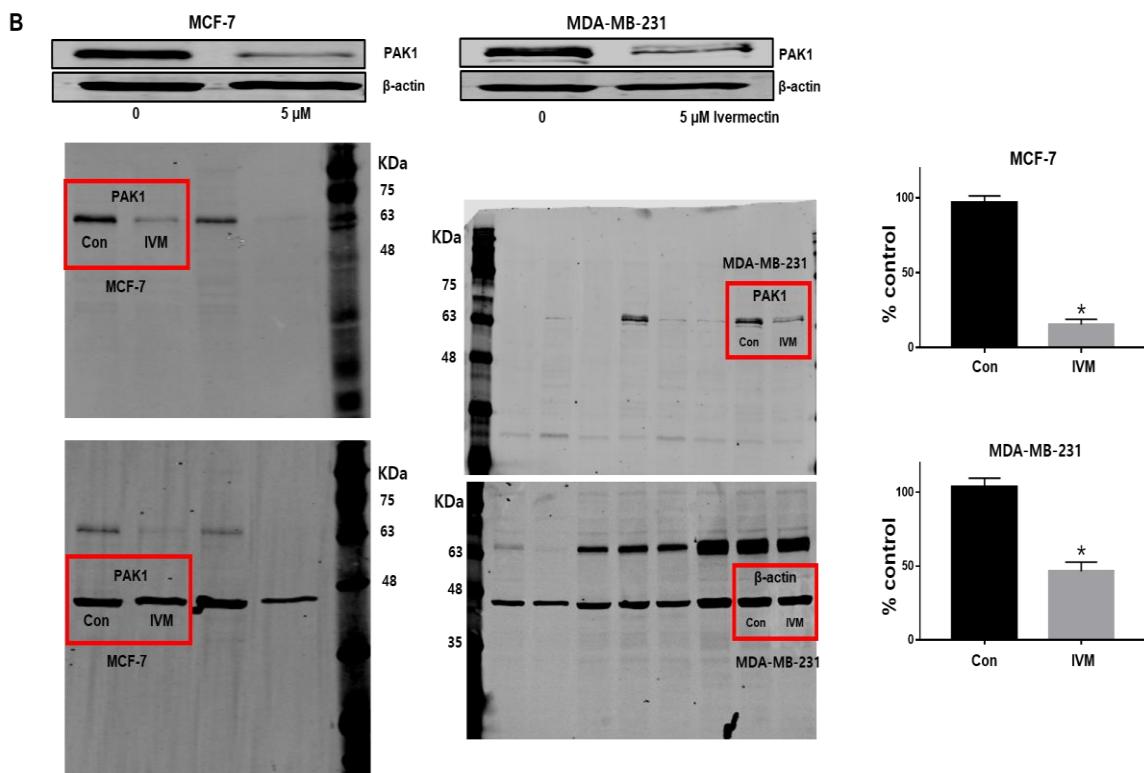
**Figure 1C**



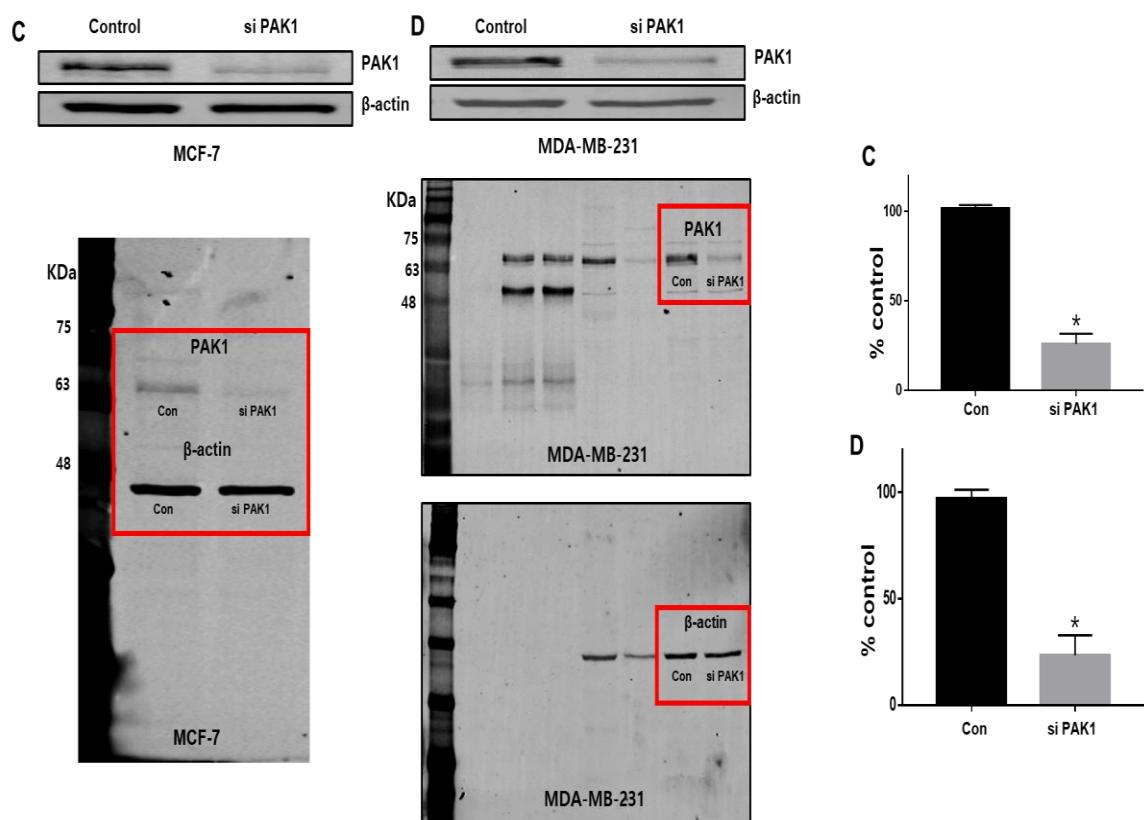
**Figure 2G**



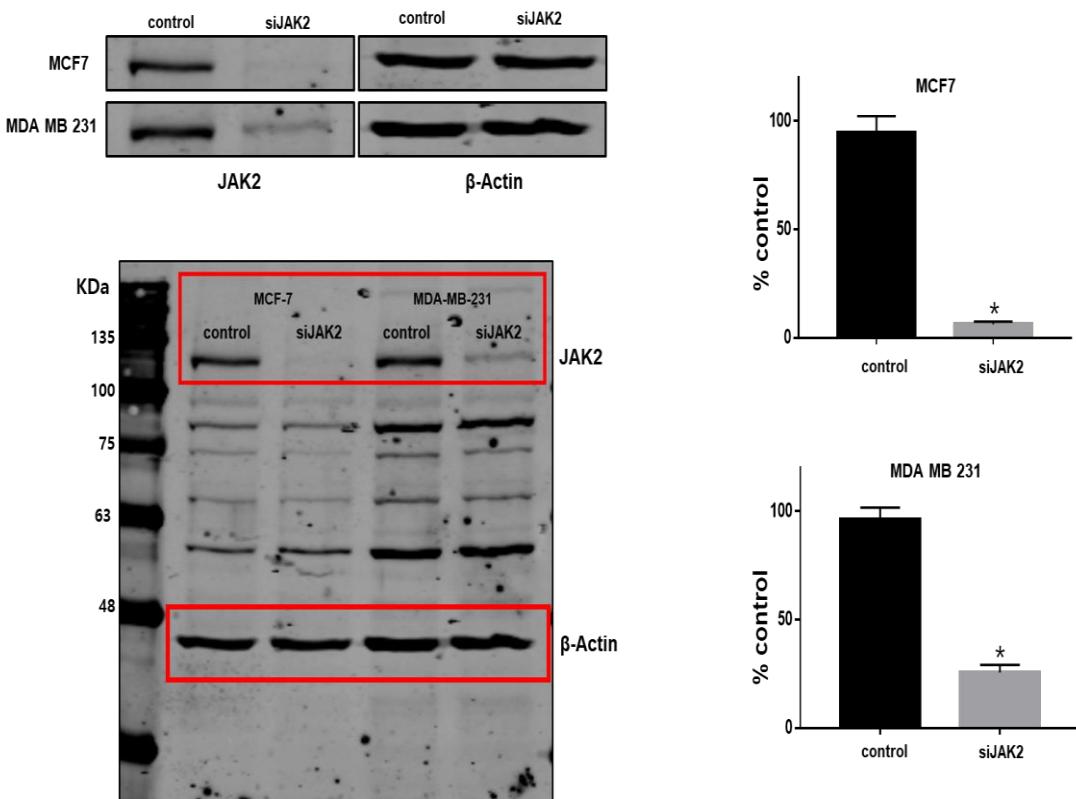
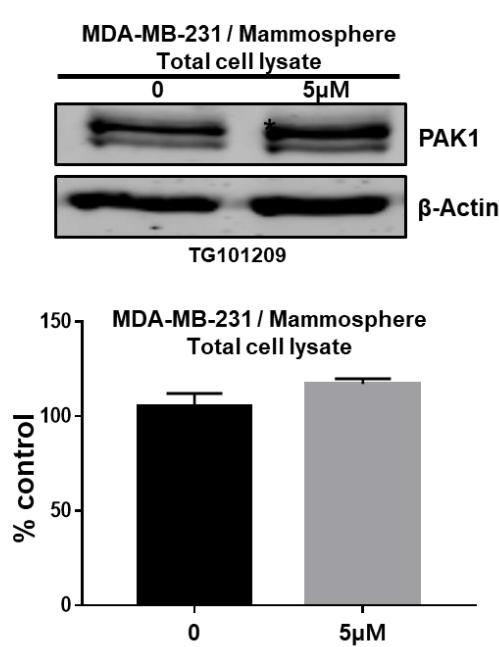
**Figure 2J**



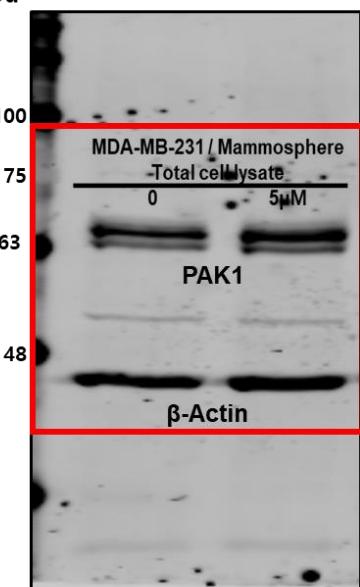
**Figure 3B**

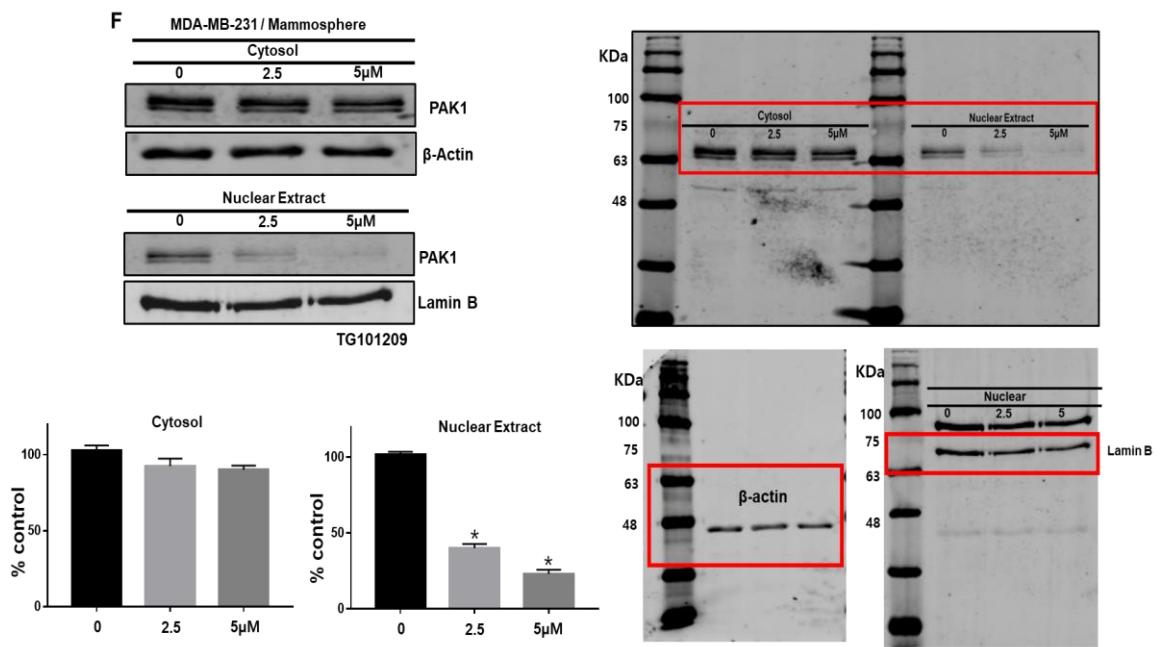


**Figure 3CD**

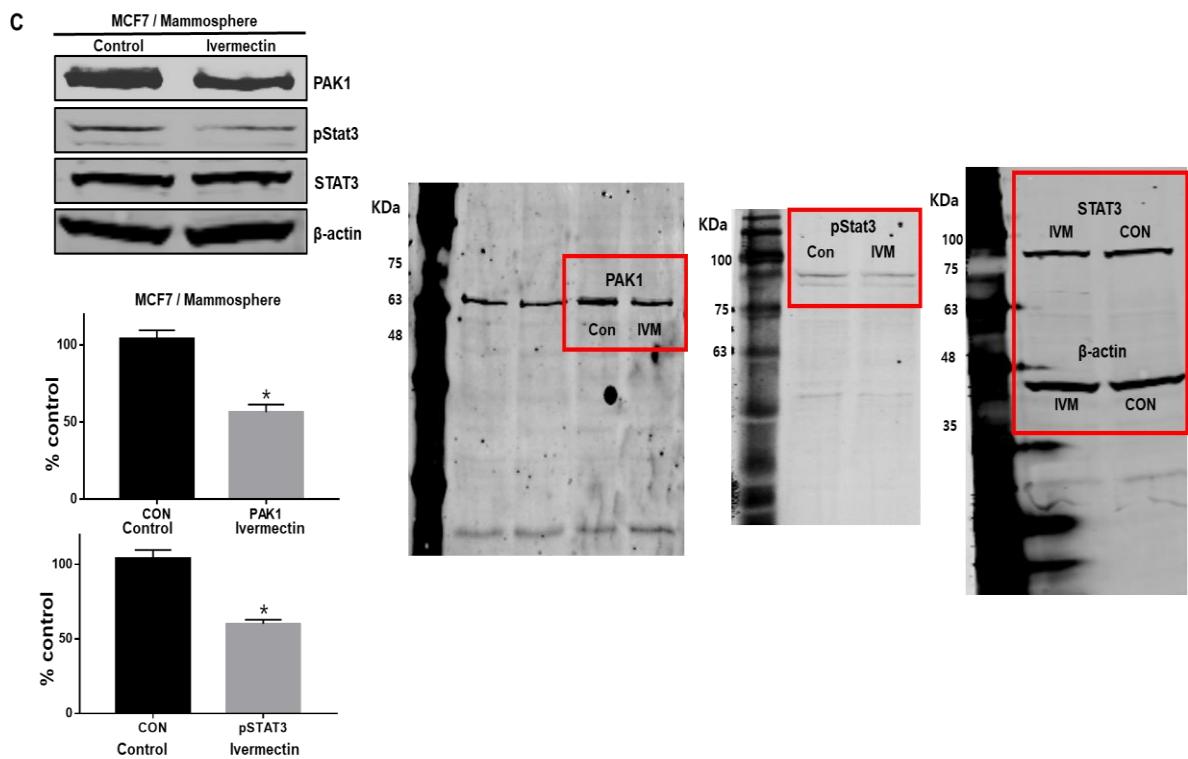
**B****Figure 4B****E**

KDa

**Figure 4E**



**Figure 4F**



**Figure 5C**

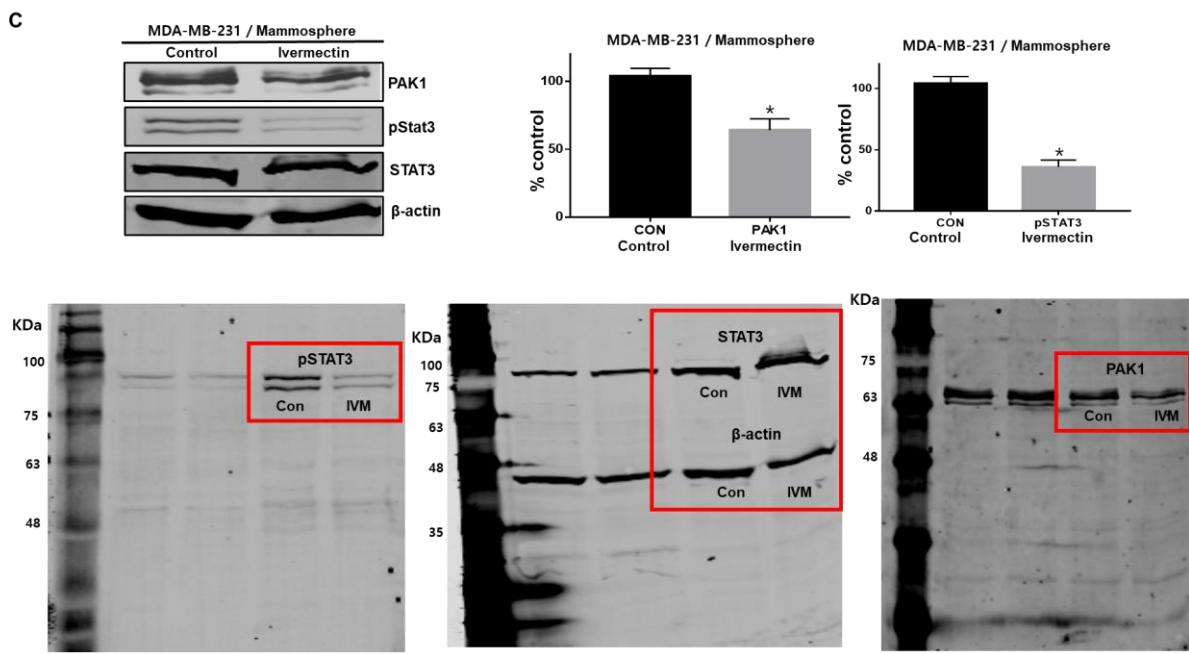


Figure 5C

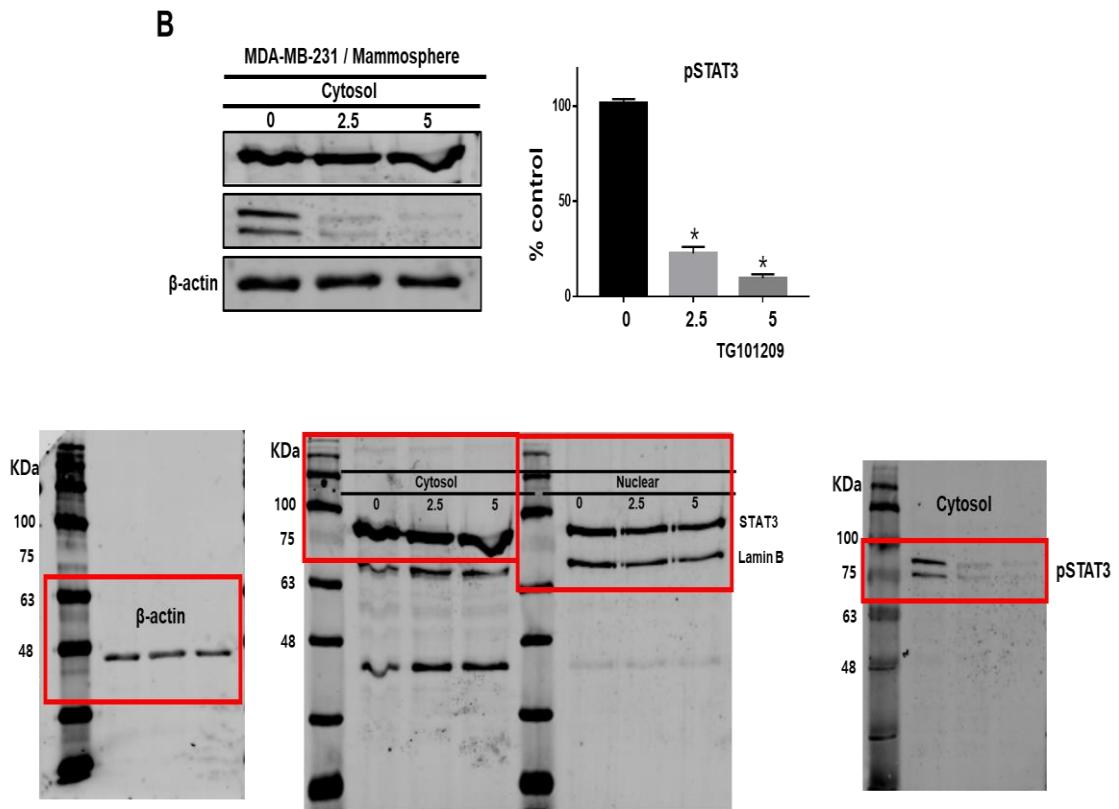
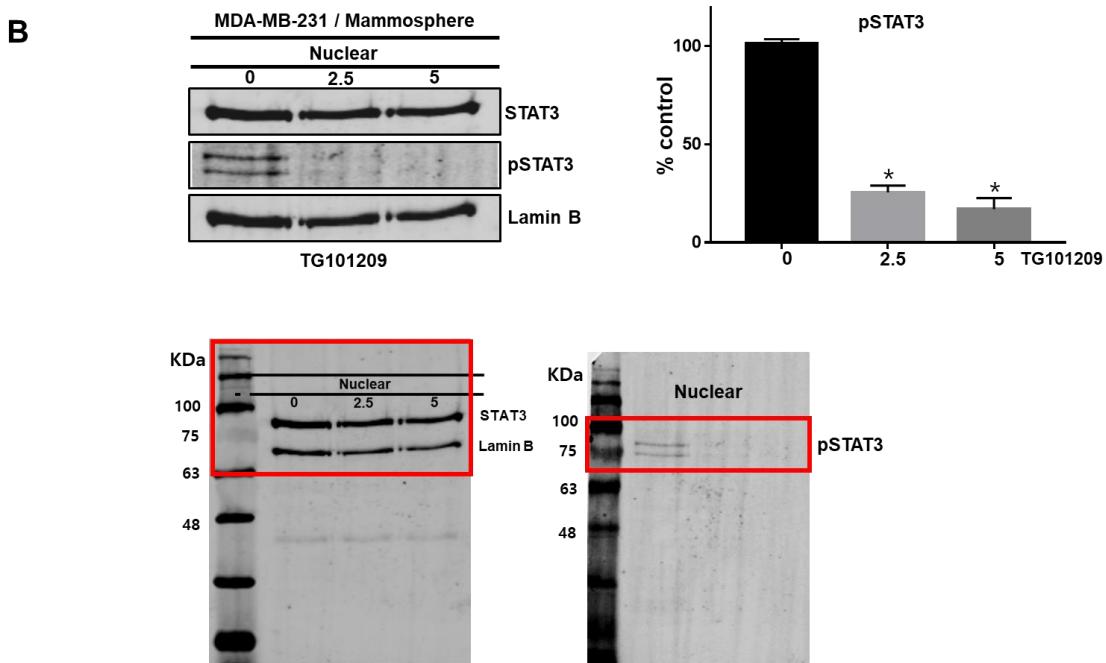
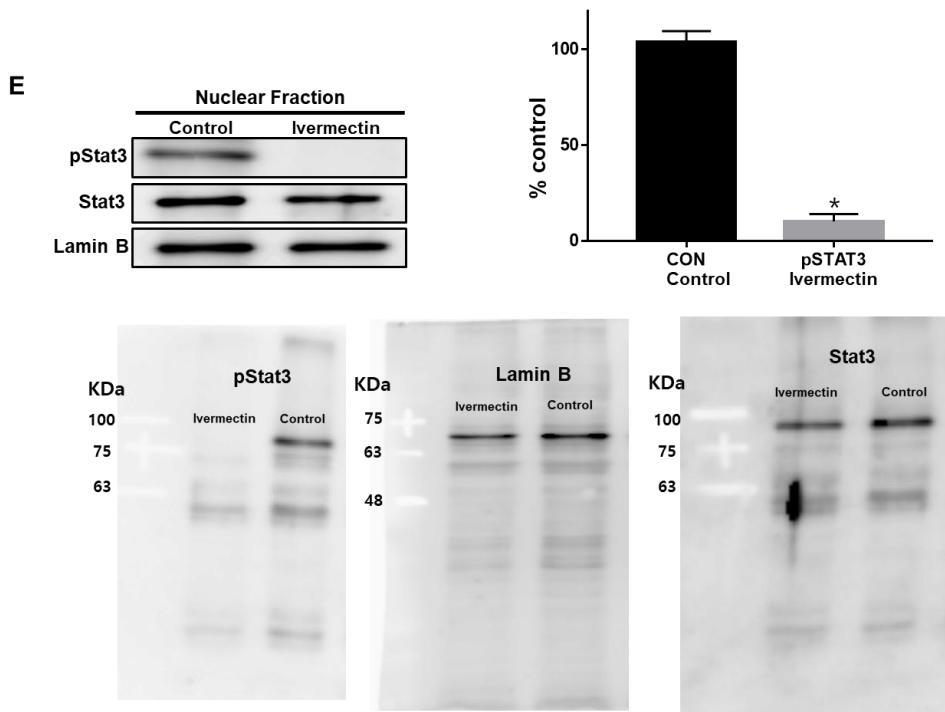


Figure 6B



**Figure 6B**



**Figure 7E**

**Figure S2.** Western blot figures including densitometry readings/intensity ratio of each band, the whole blot, and all the bands with all molecular weight markers on the Western blot.