

**Endoplasmic reticulum stress differentially modulates the IL-6 family of cytokines in murine astrocytes and macrophages.**

**Cristina L Sanchez<sup>1</sup>, Savannah G Sims<sup>1</sup>, John D Nowery<sup>1</sup>, and Gordon P Meares<sup>1,2\*</sup>**

<sup>1</sup>West Virginia University, Department of Microbiology, Immunology, and Cell Biology, Morgantown, WV 26506, USA

<sup>2</sup>West Virginia University, Department of Neuroscience, Morgantown, WV 26506, USA

\*To whom correspondence should be addressed:

Dr. Gordon Meares  
West Virginia University School of Medicine  
64 Medical Center Drive, HSC North 2084  
Morgantown, WV 26506  
304-293-6260  
[gpmeares@hsc.wvu.edu](mailto:gpmeares@hsc.wvu.edu)

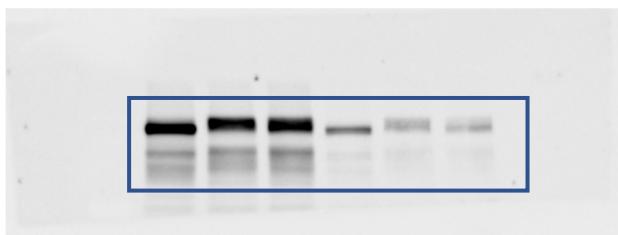
**Supplemental**

## Supplemental Figure 1

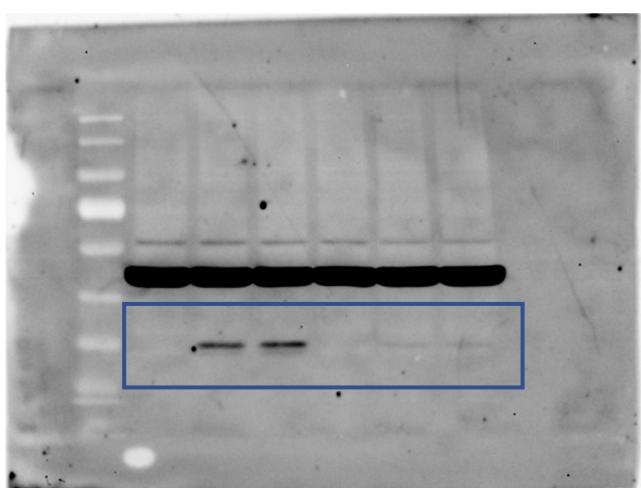
### Immunoblots from figure 4

PERK

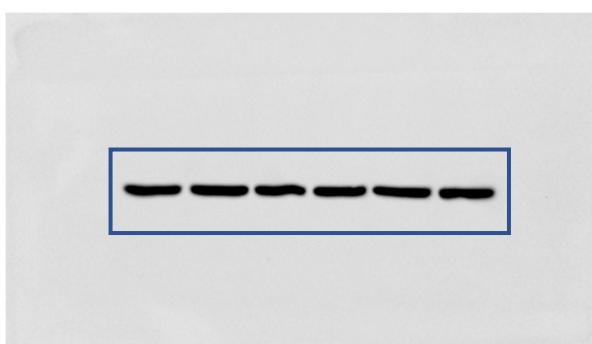
1 2 3 4 5 6



CHOP



GAPDH



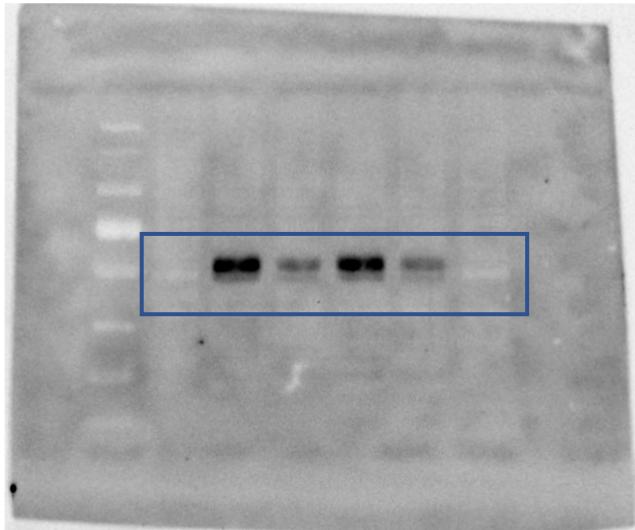
1. Cre-ER<sup>TM</sup> (-) Untreated
2. Cre-ER<sup>TM</sup> (-) Thapsigargin 1  $\mu$ M, 4 h
3. Cre-ER<sup>TM</sup> (-) Tunicamycin 5  $\mu$ M, 4 h
4. Cre-ER<sup>TM</sup> (+) Untreated
5. Cre-ER<sup>TM</sup> (+) Thapsigargin 1  $\mu$ M, 4 h
6. Cre-ER<sup>TM</sup> (+) Tunicamycin 5  $\mu$ M, 4 h

## Supplemental Figure 2

### Immunoblots from figure 5

ATF4

1 2 3 4 5 6



GAPDH



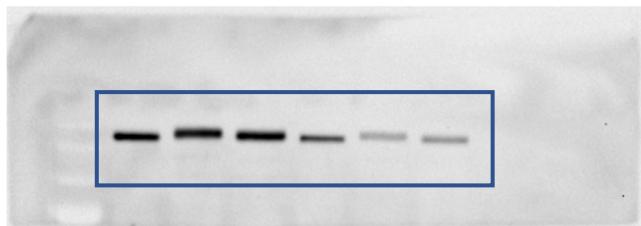
1. Untreated
2. Thapsigargin 1  $\mu$ M, 4 h
3. ISRib 0.5  $\mu$ M 30 min pre + Thapsigargin 4 h
4. Tunicamycin 5  $\mu$ M, 4 h
5. ISRib 30 min pre + Tunicamycin 4 h
6. ISRib 4.5 h

### Supplemental Figure 3

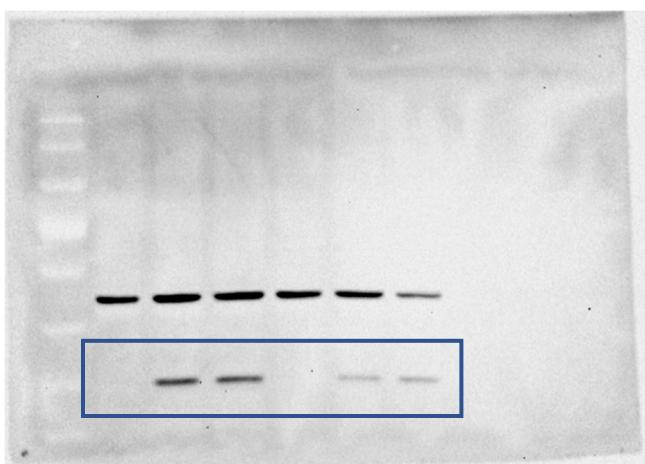
#### Immunoblots from figure 6

PERK

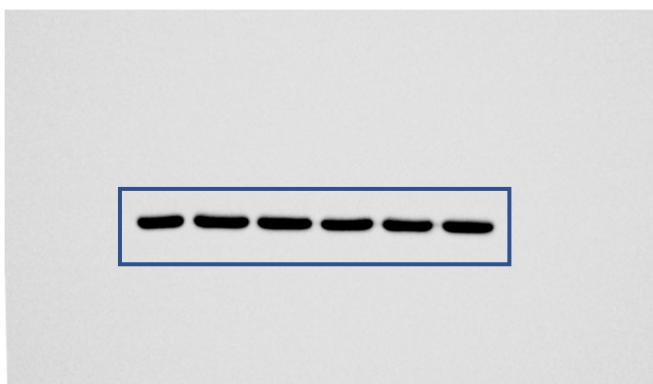
1 2 3 4 5 6



CHOP



GAPDH



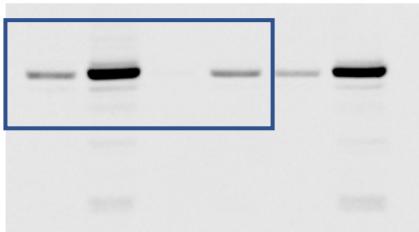
1. Cre-ER<sup>TM</sup> (-) Untreated
2. Cre-ER<sup>TM</sup> (-) Thapsigargin 1 µM, 4 h
3. Cre-ER<sup>TM</sup> (-) Tunicamycin 5 µM, 4 h
4. Cre-ER<sup>TM</sup> (+) Untreated
5. Cre-ER<sup>TM</sup> (+) Thapsigargin 1 µM, 4 h
6. Cre-ER<sup>TM</sup> (+) Tunicamycin 5 µM, 4 h

## Supplemental Figure 4

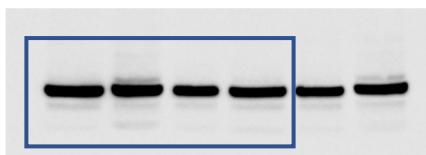
### Immunoblots from figure 7

P-STAT3

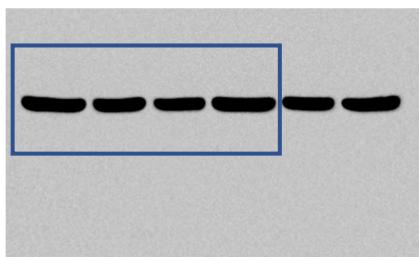
1    2    3    4



STAT3



GAPDH



1. Untreated
2. Oncostatin M 2.5 ng/ml, 30 min
3. AZD1480 2  $\mu$ M, 1 h
4. AZD1480 30 min pre + OSM 30 min