

**Supplementary Figures for “An inducible retroviral expression system for tandem affinity purification mass-spectrometry-based proteomics identifies MLKL as an HSP90 client”**

Johannes W. Bigenzahn<sup>1,5</sup>, Astrid Fauster<sup>1,5</sup>, Manuele Rebsamen<sup>1</sup>, Richard K. Kandasamy<sup>1</sup>, Stefania Scorzoni<sup>1</sup>, Gregory I. Vladimer<sup>1</sup>, André C. Müller<sup>1</sup>, Matthias Gstaiger<sup>2</sup>, Johannes Zuber<sup>3</sup>, Keiryn L. Bennett<sup>1</sup>, and Giulio Superti-Furga<sup>1,4,\*</sup>

<sup>1</sup>CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences, Vienna, Austria

<sup>2</sup>Department of Biology, Institute of Molecular Systems Biology, ETH Zürich, Zürich, Switzerland

<sup>3</sup>Research Institute of Molecular Pathology (IMP), Vienna Biocenter (VBC), 1030 Vienna, Austria

<sup>4</sup>Center for Physiology and Pharmacology, Medical University of Vienna, Vienna, Austria

<sup>5</sup>These authors contributed equally to this work.

**Corresponding author:**

Giulio Superti-Furga

CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences

Lazarettgasse 14, AKH BT25.3

1090 Vienna, Austria

Email: [gsuperti@cemm.oeaw.ac.at](mailto:gsuperti@cemm.oeaw.ac.at)

Telephone: +43 1 40160 70 001

## Supporting Information

### Supplementary Figure 1

(A-C) FACS analysis of K-562 RIEP (A), HT-29 RIEP (B) and KCL-22 RIEP (C) GFP cells untreated or treated for 24 h with 2 µg/mL doxycycline.

### Supplementary Figure 2

(A) Schematic illustration of inducible TRE3G-driven pRSHIC expression vectors with Gateway-cloning cassette fused to N- (upper) or C-terminal (lower) SH-tag. (B) Flow cytometry analysis of K-562 RIEP transduced with pRSHIC<sub>TREtight</sub>-GFP or pRSHIC<sub>TRE3G</sub>-GFP untreated or treated for 24 h with 1 µg/mL doxycycline. Corresponding wild-type cells are the baseline control.

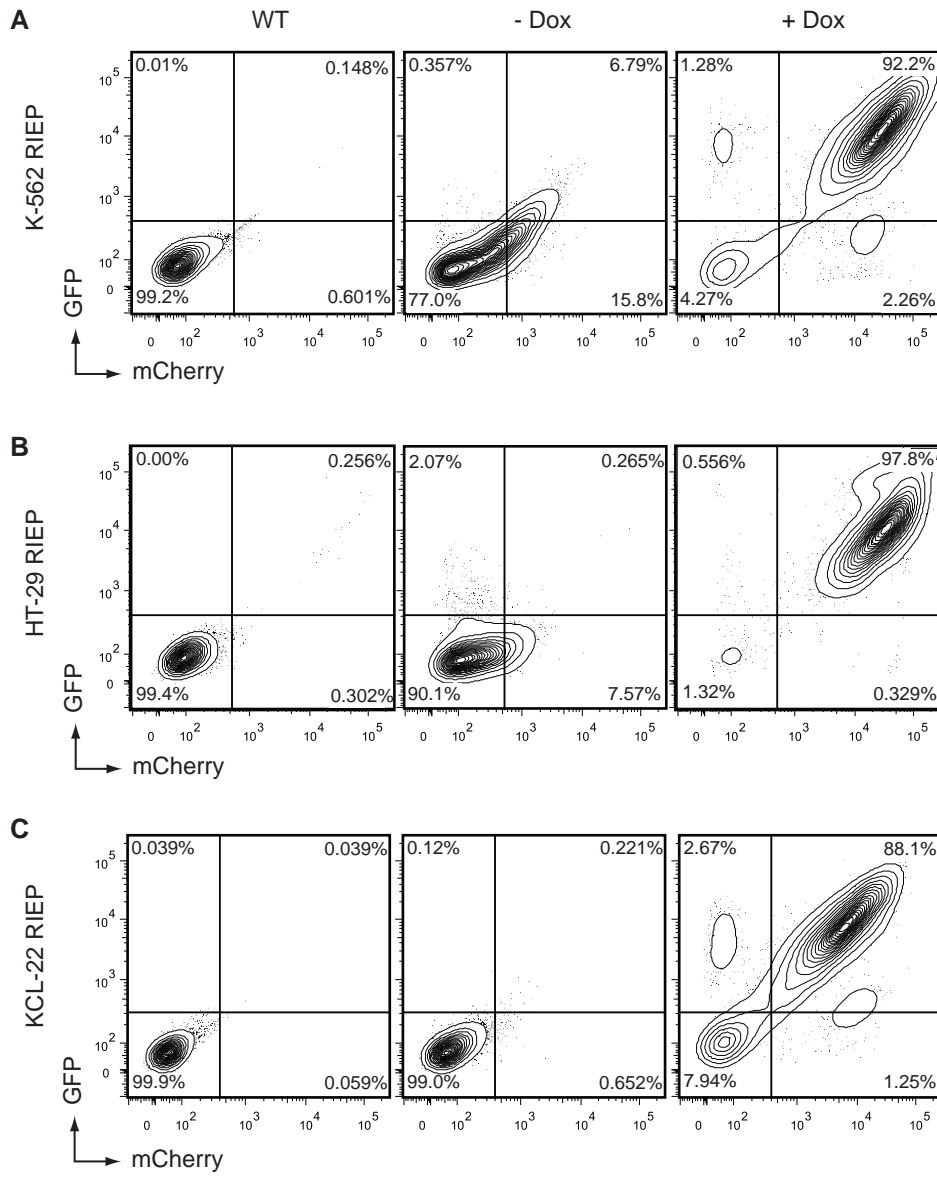
### Supplementary Figure 3

(A) Ba/F3 rtTA3 cells inducibly expressing NRAS G12D or GFP were treated with 1 µg/mL doxycycline for 24 h. Cells were lysed and immunoblotted with the indicated antibodies. (B) Flow cytometry analysis of Ba/F3 rtTA3 cells expressing NRAS G12D or GFP treated with 1 µg/mL doxycycline for 24 h. (C) Ba/F3 rtTA3 NRAS G12D cells were induced with 1 µg/mL doxycycline in the presence of IL-3 for 48 h. Cells were then washed once and cultured in the presence of 1 µg/mL doxycycline and increasing concentrations of trametinib with or without IL-3 for 3 h. DMSO-treated cells were the baseline control. Subsequently cells were lysed and immunoblotted with the indicated antibodies.

### Supplementary Figure 4

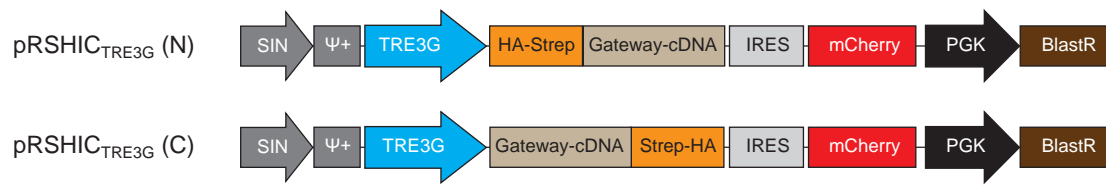
(A) Flow cytometry analysis of HT-29 RIEP MLKL S358D cells induced with 2 µg/mL doxycycline for the indicated times. (B) Microscopy (brightfield, 10×) of HT-29 RIEP MLKL S358D cells uninduced or induced with 2 µg/mL doxycycline for 24 h (scale bar: 100 µm). (C) Flow cytometry analysis of HT-29 RIEP MLKL S358D cells treated with 2 µg/mL doxycycline and Nec-1 (10 µM), NSA (10µM) or geldanamycin (GA, 1 µM) for 6 h.

# Supplementary Figure 1

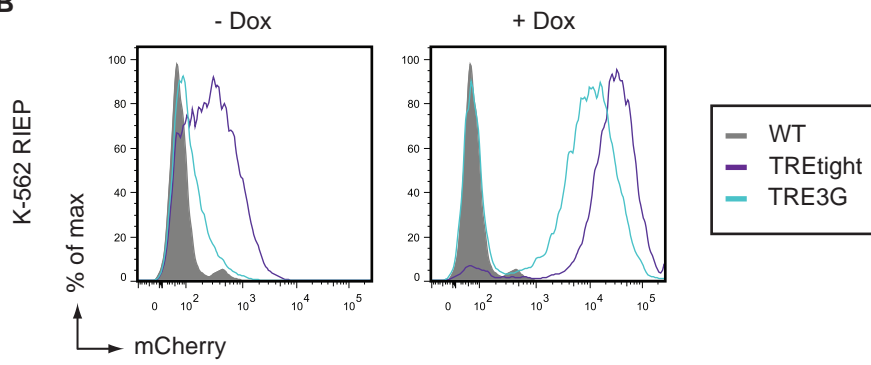


## Supplementary Figure 2

**A**



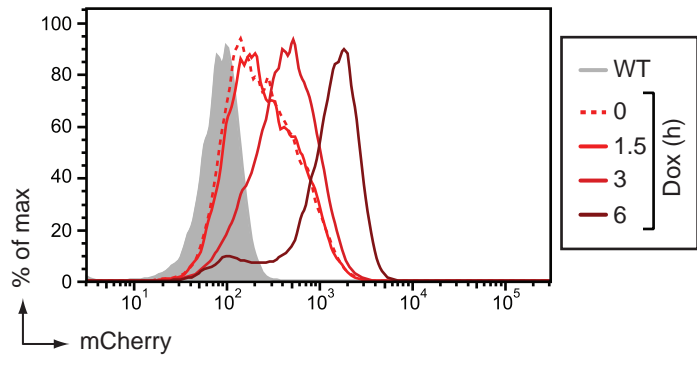
**B**



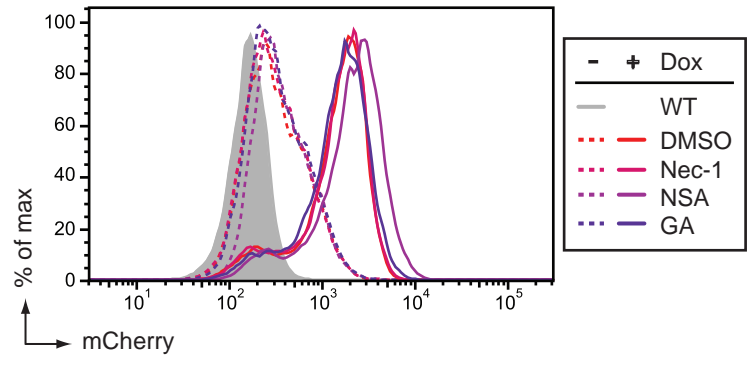


# Supplementary Figure 4

**A** HT-29 RIEP MLKL S358D



**C** HT-29 RIEP MLKL S358D



**B**

