## Data Collection and Presentation Checklist:

| Ethical Statements (if applicable): |
|------------------------------------|
| **Humans** | Complete and upload the Ethics Declaration Statement you received with your decision letter. |
| **Animals** | Provide species, sex, strain, age, source and husbandry conditions. |
| | Note if the study was blinded or not. |
| | Provide a statement confirming the research was approved by the Institutional Animal Care and Use Committee. |
| | Complete and upload the [ARRIVE Compliance Questionnaire](#). Visit [ARRIVE](#) for more information. |

| Reagents and Biological Materials (if applicable) |
|-------------------------------------------------|
| Include manufacture name, catalog number (and lot number for antibodies) for all reagents used (including fluorochromes and stains). |
| Cell lines: provide source, derivation and authentication method. |

| Images (if applicable) |
|-------------------------|
| **General** | Do not introduce or remove any features in your images. Leave any blemishes. |
| | If any adjustments to contrast, balance or brightness are made, they must be applied uniformly across the entire image. Any nonlinear adjustments must be disclosed in the legend. |
| | Check that images are not pixelated when reasonably magnified. Images must be at 300 dpi. TIFF images are encouraged. Avoid jpegs or using PowerPoint as this will compress your images. |
| | Scale bars must be included. |
| | If splicing images, the borders must be marked and noted in the legend. |

| Microscopy (include the following) |
|------------------------------------|
| Camera make and model. |
| Microscope make and model. |
| Objective magnification, type and numerical aperture. Magnification must be mentioned in figure legend. |
Fluorochromes and stains. They should also be mentioned in the legend.

Acquisition software.

Show all individual channels in grey scale and merged image in color (all at the same intensity).

| Western Blots          | Westerns should not be modified for contrast, the entire tonal range should be present. |
|------------------------|----------------------------------------------------------------------------------------|
|                        | Loading controls must be run on the same gel as the protein of interest.               |
|                        | Signal intensities must be in the linear range and not oversaturated.                  |
|                        | Include at least two molecular weight markers, one above and one below your band of interest. |
|                        | If a blot is spliced together, you must mark the border and explain this in the legend. Splicing across different blots is not allowed. |
|                        | It is best practice to normalize protein levels against total protein, not house-keeping proteins. |
|                        | Post-translationally modified proteins (PTMs) must use total protein for normalization. |
|                        | Provide raw blots as supplementary data. These may be combined as a single Word doc. Blots must be accurately labeled to match figures in the main doc and include the molecular weight ladder and loading control. |

| RNAi, Gene Expression, Microarrays | At least two different siRNAs targeting different gene areas must be used. |
|-----------------------------------|---------------------------------------------------------------------------|
|                                   | At least two different control siRNAs must be used.                        |
|                                   | Gene expression studies cannot be presented alone without providing evidence that the changes in levels have downstream functional consequences. |
|                                   | Microarray data must include:                                             |
|                                   |   The raw data for each hybridization.                                     |
|                                   |   Experimental Factors and values.                                         |
|                                   |   Experimental design.                                                     |
|                                   |   Data processing protocols (e.g., normalization method).                  |

| Cell culture                                      | At least three appropriate cell lines should be used to confirm findings. If there are fewer, add a statement explaining why only 1 or 2 were used. |
