

Data Collection and Presentation Checklist:

Ethical Statements (if applicable):		
Humans	Complete and upload the Ethics Declaration Statement you received with your decision letter.	<input type="checkbox"/>
Animals	Provide species, sex, strain, age, source and husbandry conditions.	<input type="checkbox"/>
	Note if the study was blinded or not.	<input type="checkbox"/>
	Provide a statement confirming the research was approved by the Institutional Animal Care and Use Committee.	<input type="checkbox"/>
	Complete and upload the ARRIVE Compliance Questionnaire . Visit ARRIVE for more information.	<input type="checkbox"/>
Reagents and Biological Materials (if applicable)		
	Include manufacture name, catalog number (and lot number for antibodies) for all reagents used (including fluorochromes and stains).	<input type="checkbox"/>
	Cell lines: provide source, derivation and authentication method.	<input type="checkbox"/>
Images (if applicable)		
General	Do not introduce or remove any features in your images. Leave any blemishes.	<input type="checkbox"/>
	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.	<input type="checkbox"/>
	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.	<input type="checkbox"/>
	Scale bars must be included.	<input type="checkbox"/>
	If splicing images, the borders must be marked and noted in the legend.	<input type="checkbox"/>
Microscopy (include the following)	Camera make and model.	<input type="checkbox"/>
	Microscope make and model.	<input type="checkbox"/>
	Objective magnification, type and numerical aperture. Magnification must be mentioned in the figure legend.	<input type="checkbox"/>

	Fluorochromes and stains. They should also be mentioned in the legend.	<input type="checkbox"/>
	Acquisition software.	
	Show all individual channels in greyscale and merged image in color (all at the same intensity).	<input type="checkbox"/>
Western Blots	Westerns should <u>not</u> be modified for contrast. The entire tonal range should be present.	<input type="checkbox"/>
	Include at least two molecular weight markers, one above and one below your band of interest.	<input type="checkbox"/>
	If a blot is spliced together, you must mark the border and explain this in the legend. Splicing across different blots is <u>not</u> allowed.	<input type="checkbox"/>
	It is best practice to normalize protein levels against total protein, not house-keeping proteins.	<input type="checkbox"/>
	Post-translationally modified proteins (PTMs) must use total protein for normalization.	<input type="checkbox"/>
	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. Include the molecular weight ladder.	<input type="checkbox"/>
RNAi, Gene Expression, Microarrays	At least two different siRNAs targeting different gene areas must be used.	<input type="checkbox"/>
	At least two different control siRNAs must be used.	<input type="checkbox"/>
	Gene expression studies cannot be presented alone without providing evidence that the changes in levels have downstream functional consequences.	<input type="checkbox"/>
	Microarray data must include: <ul style="list-style-type: none"> ○ 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.	<input type="checkbox"/>
Graphs	Bar graphs are strongly discouraged as ALL data points must be shown. Instead, consider dot plots, scatter plots or box and whisker plots. Include the appropriate error bars and average	<input type="checkbox"/>