Materials Design Analysis Reporting (MDAR) Checklist for Authors

The MDAR framework establishes a minimum set of requirements in transparent reporting applicable to studies in the life sciences (see Statement of Task: doi:10.31222/osf.io/9sm4x.). The MDAR checklist is a tool for authors, editors and others seeking to adopt the MDAR framework for transparent reporting in manuscripts and other outputs. Please refer to the MDAR Elaboration Document for additional context for the MDAR framework.

Materials

Antibodies	Yes (indicate where provided: section/paragraph)	n/a
For commercial reagents, provide supplier name, catalogue number and RRID, if available.	Yes, In the methods section, Western blot paragraph.	

Cell materials	Yes (indicate where provided: section/paragraph)	n/a
Cell lines: Provide species information, strain. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID	Yes, In the methods section, cell lines paragraph.	
Primary cultures: Provide species, strain, sex of origin, genetic modification status.	Not use primary cultures.	n/a

Experimental animals	Yes (indicate where provided: section/paragraph)	n/a
Laboratory animals: Provide species, strain, sex, age, genetic modification status. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID	Not use experimental animals.	n/a
Animal observed in or captured from the field: Provide species, sex and age where possible	Not use experimental animals.	n/a
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID	Not use experimental animals.	n/a

Plants and microbes	Yes (indicate where provided: section/paragraph)	n/a
Plants: provide species and strain, unique accession number if available, and source (including location for collected wild specimens)	Not use plants and micorbes.	n/a
Microbes: provide species and strain, unique accession number if available, and source	Not use plants and micorbes.	n/a

Human research participants	Yes (indicate where provided: section/paragraph)	n/a
Identify authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	Yes, In the footnote section.	
Provide statement confirming informed consent obtained from study participants.	Yes, in the footnote section.	
Report on age and sex for all study participants.	Waste blood samples from clinical trials were used for this experiment, we only got the gender information. The Sex information is in the method section Clinical samples paragraph.	n/a

Design

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration	Not clinical trials	n/a

Laboratory protocol	Yes (indicate where provided: section/paragraph)	n/a
Provide DOI or other citation details if detailed step-by-step protocols are available.	Yes, doi: 10.18632/oncotarget.16038.	

Experimental study design (statistics details)	Yes (indicate where provided: section/paragraph)	n/a
State whether and how the following have been done**, or** if they were not carried out.		
Sample size determination	Not include this part.	n/a
Randomisation	Not include this part.	n/a
Blinding	Not include this part.	n/a
Inclusion/exclusion criteria	Not include this part.	n/a

Sample definition and in-laboratory replication	Yes (indicate where provided: section/paragraph)	n/a
State number of times the experiment was replicated in laboratory	Yes, except for the western blot are 2 times replicate all of the experiment are 3 times replicate.	
Define whether data describe technical or biological replicates	Yes, all the in-laboratory replication are biological replicates.	

Ethics	Yes (indicate where provided: section/paragraph)	n/a
Studies involving human participants: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	Yes, in the footnote section.	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	Not use	n/a
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.	Not use	n/a

Dual Use Research of Concern (DURC)	Yes (indicate where provided: section/paragraph)	n/a
If study is subject to dual use research of concern, state the authority granting approval and reference number for the regulatory approval	Not use	n/a

Analysis

Attrition	Yes (indicate where provided: section/paragraph)	n/a
State if sample or data point from the analysis is excluded, and whether the criteria for exclusion were determined and specified in advance.	Yes, we exclude the bad quality RNA samples by using the Nanodrop 2000 and the Agilent 2100 Bioanalyzer， RNA criteria (1.7< A260/A280 <2.2, RNA integrity number ≥7.0 and 28S/18S>0.7).indicate in the method section Gene microarray analysis paragraph.	n/a

Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of tests.	Yes, in the method section Statistical analysis paragraph.	

Data Availability	Yes (indicate where provided: section/paragraph)	n/a
State whether newly created datasets are available, including protocols for access or restriction on access.	Not include this part.	n/a
If data are publicly available, provide accession number in repository or DOI or URL.	Not include this part.	n/a
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.	Not include this part.	n/a

Code Availability	Yes (indicate where provided: section/paragraph)	n/a
For all newly generated code and software essential for replicating the main findings of the study:		
State whether the code or software is available.	Not include this part.	n/a
If code is publicly available, provide accession number in repository, or DOI or URL.	Not include this part.	n/a

Reporting

Adherence to community standards	Yes (indicate where provided: section/paragraph)	n/a
MDAR framework recommends adoption of discipline-specific guidelines, established and endorsed through community initiatives. Journals have their own policy about requiring specific guidelines and recommendations to complement MDAR.		
State if relevant guidelines (eg., ICMJE, MIBBI, ARRIVE) have been followed, and whether a checklist (eg., CONSORT, PRISMA, ARRIVE) is provided with the manuscript.	ICMJE guidelines were followed, as the journal follows ICMJE recommendations for publication.	

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