

## **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](https://doi.org/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**

<b>Antibodies</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
For commercial reagents, provide supplier name, catalogue number and RRID, if available.	Yes It was show in Methods/paragraph 8/Western blot analysis in manuscript	
<b>Cell materials</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
<b>Cell lines:</b> Provide species information, strain. Provide accession number in repository <b>OR</b> supplier name, catalog number, clone number, <b>OR</b> RRID	Yes It was show in in Methods/ paragraph 2/cell line and culture conditions in manuscript	
<b>Primary cultures:</b> Provide species, strain, sex of origin, genetic modification status.		n/a
<b>Experimental animals</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
<b>Laboratory animals:</b> Provide species, strain, sex, age, genetic modification status. Provide accession number in repository <b>OR</b> supplier name, catalog number, clone number, <b>OR</b> RRID		n/a This study does not involve animal experiments.
<b>Animal observed in or captured from the field:</b> Provide species, sex and age where possible		n/a
<b>Model organisms:</b> Provide Accession number in repository (where relevant) <b>OR</b> RRID		n/a
<b>Plants and microbes</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
<b>Plants:</b> provide species and strain, unique accession number if available, and source (including location for collected wild specimens)		n/a This study does not use any plants.
<b>Microbes:</b> provide species and strain, unique accession number if available, and source	Yes It was show in Methods/ paragraph 3/cell culture with Hp infection in manuscript	
<b>Human research participants</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
Identify authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		n/a This study does not include human research participants.
Provide statement confirming informed consent obtained from study participants.		n/a
Report on age and sex for all study participants.		n/a

**Design**

<b>Study protocol</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
For clinical trials, provide the trial registration number <b>OR</b> cite DOI in manuscript.		n/a This study does not involve clinical trials.
<b>Laboratory protocol</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
Provide DOI or other citation details if detailed step-by-step protocols are available.		n/a This content is not suitable for this study.
<b>Experimental study design (statistics details)</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
State whether and how the following have been done, <b>or</b> if they were not carried out.		n/a This content is not suitable for this study.
Sample size determination		n/a This content is not suitable for this study.
Randomisation		n/a This content is not suitable for this study.
Blinding		n/a This content is not suitable for this study.
Inclusion/exclusion criteria		n/a This content is not suitable for this study.
<b>Sample definition and in-laboratory replication</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
State number of times the experiment was replicated in laboratory	Yes, each experiment was repeated three times. It was shown in Figure 1-6 legends in manuscript	
Define whether data describe technical or biological replicates	Yes, biological replicates	
<b>Ethics</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
Studies involving human participants: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		n/a This study does not involve human research participants.
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		n/a This study does not involve experimental animals.
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.		n/a This study does not involve specimen and field samples.
<b>Dual Use Research of Concern (DURC)</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
If study is subject to dual use research of concern, state the authority granting approval and reference number for the regulatory approval		n/a This study is not subject to dual use of research of concern.

**Analysis**

<b>Attrition</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
State if sample or data point from the analysis is excluded, and whether the criteria for exclusion were determined and specified in advance.	Yes, It was show in Methods/ paragraph 6/Rna-sequecning and bioinformatics analysis.	
<b>Statistics</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
Describe statistical tests used and justify choice of tests.	Yes ,it was shown in Methods/ paragraph 11.	
<b>Data Availability</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
State whether newly created datasets are available, including protocols for access or restriction on access.	Yes ,it was shown in Methods/ paragraph 6	
If data are publicly available, provide accession number in repository or DOI or URL.	Yes,the sequence data have been upload to ncbi with data PRJNA496261	
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		n/a No publicly available data are used in this study.
<b>Code Availability</b>	<b>Yes (indicate where provided:</b>	<b>n/a</b>
For all newly generated code and software essential for replicating the main findings of the study:		n/a No new code is required for this study.
State whether the code or software is available.		n/a
If code is publicly available, provide accession number in repository, or DOI or URL. For all newly		n/a

**Reporting**

<b>Adherence to community standards</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
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.	

Article information: <https://dx.doi.org/10.21037/atm-21-7045>