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.	Trypsin solution was purchased from Shanghai ZhiYou Biotechnology Co., Ltd. GE-HyClone fetal bovine serum was purchased from Shanghai Shenbang Biological Co.,Ltd. S100A8 mouse anti-human IgG antibody, S100A9 mouse anti-human IgG antibody, MMP7 rabbit anti-human IgG antibody were purchased from Abcam Bioengineering Co., UK; Solarbio HRP-conjugated goat anti-mouse IgG, Solarbio HRP-conjugated mouse anti-rabbit IgG, and Solarbio HRP-conjugated goat anti-rabbit IgG were purchased from Shuanghai Jingkehuaxue Co., Ltd. DAB chromogenic reagent kits were purchased from Shanghai MSK Biological Co., Ltd. Recombinant pEGFP-N1-S100A8 and recombinant pEGFP-N1-S100A9 overexpression vectors and S100A8 and S100A9 RNA interference (RNAi) vectors were constructed by Shanghai GenePharma Co., Ltd . Lipofectamine™2000 was purchased from Invitrogen. Primers were synthesized by GenePharma (Shanghai, China).	

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	The human NPC CNE-2 cell line was purchased from the Cell Bank Shanghai Institutes for biological research, Chinese Academy of Sciences, Chinese Academy of Sciences.	
Primary cultures: Provide species, strain, sex of origin, genetic modification status.	No primary culture is used.	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	No animals are used.	N/A
Animal observed in or captured from the field: Provide species, sex and age where possible	No animals are used.	N/A
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID	No animals are used.	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)	No plants are used.	N/A
Microbes: provide species and strain, unique accession number if available, and source	No microbes are used.	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.	No human research participant.	N/A
Provide statement confirming informed consent obtained from study participants.	No human research participant.	N/A
Report on age and sex for all study participants.	No human research participant.	N/A

Design

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration number **OR** cite DOI in manuscript.	No human research participant.	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.		N/A

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		N/A
Randomisation		N/A
Blinding		N/A
Inclusion/exclusion criteria		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		N/A
Define whether data describe technical or biological replicates	Technical replicate	

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.		N/A
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		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.		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		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.		N/A

Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of tests.	SPSS 19.0 software was used for the statistical analyses. Measurement data are expressed as the mean ± standard deviations ($\bar{x} \pm s$). Intergroup comparisons were performed using analysis of variance (ANOVA). Pairwise comparisons between groups were performed using the *t* test. Count data are expressed as n (%), and intergroup comparisons were performed using the χ^2 test. $P<0.05$ indicated that a difference was statistically significant.	

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.		N/A
If data are publicly available, provide accession number in repository or DOI or URL.		N/A
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		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.		N/A
If code is publicly available, provide accession number in repository, or DOI or URL.		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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