

Wet lab reproducibility checklist

Study design

- ✓ Sample sizes:
 - ✓ Calculate prior to experiment to ensure statistical power of detection
 - ✓ Report as exact number not range
 - ✓ Define anomaly criteria prior to experiment
 - ✓ Document changes in sample size with reasons for change
- ✓ Calibrate instruments
- ✓ Outline control studies with positive, negative and reagent being the most important.
- ✓ Document method of sample randomization in experimental description
- ✓ Document level of blinding present in experiment
- ✓ Conduct and document both:
 - ✓ Technical replicants from same source/aliquot
 - ✓ Biological replicants from different source/aliquot
- ✓ Document and provide step by step protocols for submission as supplementary data
- ✓ Save data, protocols and materials information in an accessible location

Reagents

For all Reagents Report:

- ✓ Vendor
- ✓ Product number
- ✓ Lot

If reagents are lab-made or gifted, ensure creation process is documented

Antibodies:

- ✓ Assess and document Sensitivity, Specificity and Range of Reactivity
- ✓ Catalog and clone number documented
- ✓ Primary citation documented
- ✓ Detail any validation required as supplementary data

Cell lines:

- ✓ Double check cells against International Cell Line Authentication Committee list of commonly misidentified cell lines



Scan QR code

Document validation of cell line including:

- ✓ Method
- ✓ Results
- ✓ Last date of authentication
- ✓ Mycoplasma contamination testing