

AUTHENTICATION OF KEY BIOLOGICAL AND/OR CHEMICAL RESOURCES SF 424 (R&R) - Version H

DEFINITION

NIH defines key biological and/or chemical resources as follows:

- Key biological and/or chemical resources may or may not have been generated with NIH funds and:
 - 1) May differ from laboratory to laboratory over time;
 - 2) May have qualities and/or qualifications that could influence the research data;
 - 3) Are integral to the proposed research. These include, but are not limited to, cell lines, specialty chemicals, antibodies, and other biologics.
- Standard laboratory reagents that are not expected to vary do not need to be included in the plan. Examples are buffers and other common biologicals or chemicals.

CONTENT INSTRUCTIONS

Please follow the [Authentication of Key Biological and/or Chemical Resources Application Guidelines](#) and any guidance provided in your specific funding opportunity announcement (FOA) when completing the Authentication of Key Biological and/or Chemical Resources attachment.

If applicable to the proposed science, briefly describe methods to ensure the identity and validity of key biological and/or chemical resources used in the proposed studies. A maximum of one page is suggested.

Do not include authentication procedures in your Research Strategy attachment as preliminary results.

Use of URLs and hyperlinks in this attachment is not allowed unless specified in the FOA.

RESOURCES

[Authentication of Key Biological and/or Chemical Resources in NIH Grant Applications](#)

This NIH Extramural NEXUS blog post is the fourth segment in a series on rigor and transparency in research grant applications, and includes a detailed description of what should be included in the authentication plan attachment.

[Authentication Plan Examples](#)

This NIH Policy & Compliance webpage provides an example Authentication of Key Biological and/or Chemical Resources attachment, in addition to other resources for preparing a rigorous application.

[Rigor and Reproducibility FAQs](#)

Visit this FAQs page for answers to Frequently Asked Questions on rigor and reproducibility policies and procedures, including authentication of key biological/chemical resources.