**AUTHENTICATION OF KEY BIOLOGICAL AND CHEMICAL RESOURCES**

All key resources for this proposal will be authenticated to enhance the reproducibility of our results, as appropriate and according to NIH policy.

Key Biological Resources that will be utilized in this proposal include:

* Cell lines: xxxxx
* Transgenic mouse strains: xxxxxx
* Antibodies: xxxxx

Cell lines will be validated via…

Transgenic mouse strains are validated by...

Antibodies will be confirmed by…

All other antibodies and reagents we anticipate using for the proposed work are commercially available and validated by the companies that provide them. Other resources used in this proposal will be standard laboratory reagents. Should we need to generate or obtain additional unique resources in the course of this proposal, they will be authenticated using methods similar to those described above, as appropriate.

**NOTES**

*Purchased or established resources may have been authenticated prior to receipt, and the vendor may have included a specification sheet with the product. If the authentication data provided by the vendor meets your needs in terms of how the product will be used, this may be mentioned this in the plan, but you should also include a plan to independently verify the identity and activity of the product before use. If the product will be used long-term, consider the stability of the product and how the validity of the product will be assessed over time.*

*Key resources developed in-house should also be regularly authenticated and plans to do so should be provided in this section.*

*The methods used for authentication will depend on the key resource type, and methods may vary by research field. For instance, key cell lines might be authenticated by chromosomal analysis or short tandem repeat (STR) profiling. Key antibodies might be validated by Western blot, ELISA, immunoprecipitation, immunofluorescence, or flow cytometry using knockdown cells and positive and negative controls, depending on the assay proposed. Key chemicals might be validated by liquid or gas chromatography or mass spectrometry. Authentication plans should be based on accepted practices in the applicable field of science.*

<http://nexus.od.nih.gov/all/2016/01/29/authentication-of-key-biological-andor-chemical-resources-in-nih-grant-applications/>