

The Reproducible Researcher

Preclinical Tool Registration Guide

Step-by-Step Instructions for Registering Preclinical Research Tools

The ASAP and MJFF Open Science Team

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Preclinical Research Tools

This document provides a step-by-step guide to registering preclinical research tools.

The <u>ASAP Open Science Policy</u> requires researchers to (1) cite all newly-generated lab resources (antibodies, cell lines, plasmids/clones, transgenic models, and other reagents) and (2) to deposit those resources in a publicly accessible repository. For additional help and questions, email <u>openscience@parkinsonsroadmap.org</u>.

Table of Contents

- What is an RRID?
- Antibodies
- Cell lines
- Plasmids
- Mice
- Rats



What is an RRID?

Research Resource Identifiers (RRIDs) are persistent and unique IDs that allow researchers to reference the tools and resources that were utilized to support the research efforts described in preprints and final publications.

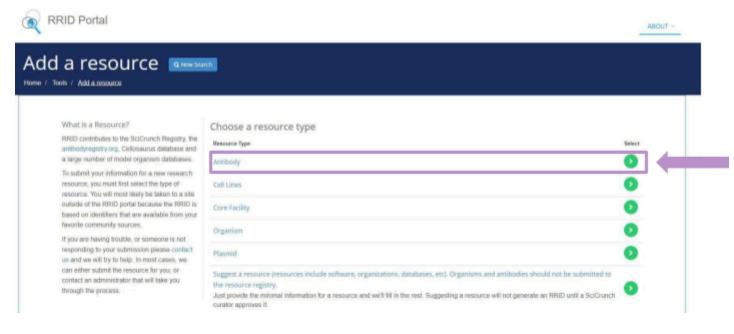
Registering lab resources for an RRID is a free process that provides several benefits:

- Centralized system: RRIDs are a way to centralize the resource database for materials being used in biomedical research
- Impact assessment: RRIDs are machine-readable, so the resource can be easily identified in any text
- Consistent: RRIDs are consistent across both publishers and vendors
- Resolve URLs and catalog numbers: Resource catalog numbers may change.
 The RRID is constant.
- **Identification of problematic tools:** Whenever there is a problematic tool (e.g., contaminated cell line), it is flagged in the RRID database

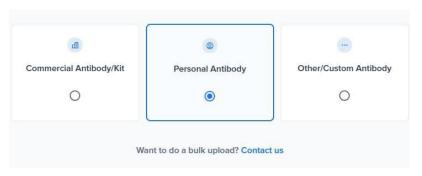


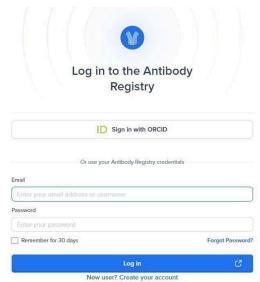
Antibodies

- 1. To register an antibody, visit https://scicrunch.org/resources/about/resource
- Select Antibody



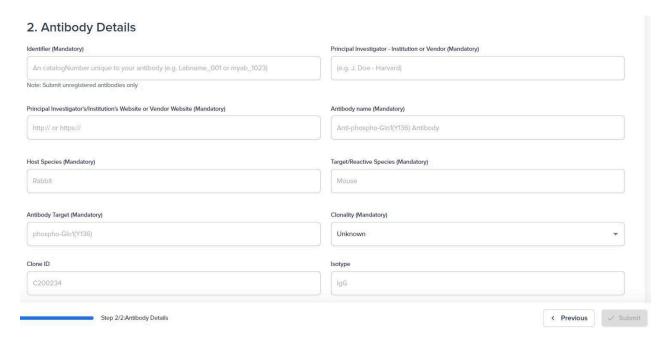
- 3. Login to the Antibody Registry with your ORCID or email and password. If you are a new user, create an account.
- 4. Select 'Personal Antibody'



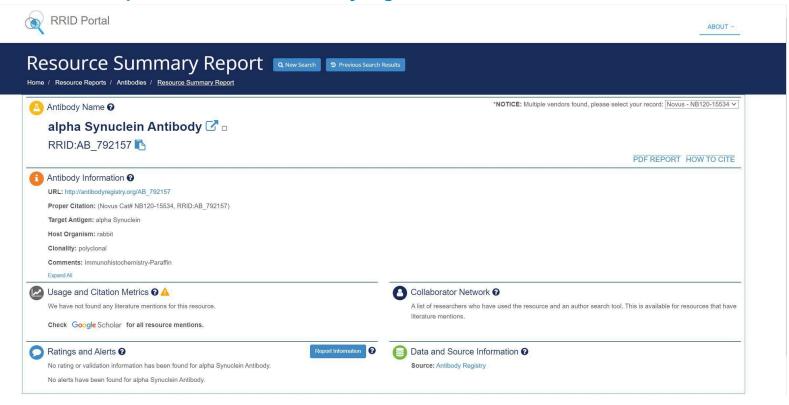




5. Add Antibody details and select 'Submit'



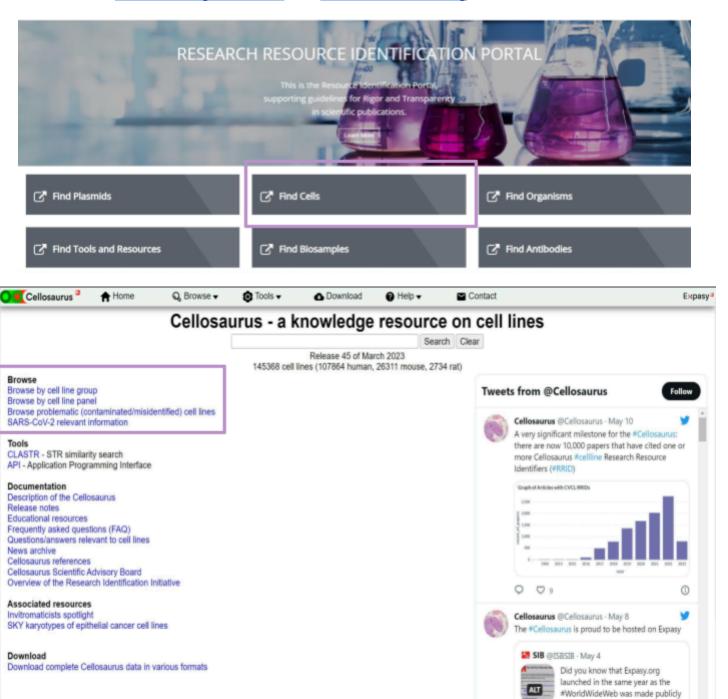
Example of successful antibody registration





Cell Lines

1. Confirm novelty by searching for similar registered cell lines at scicrunch.org/resources and www.cellosaurus.org





2. Register cell lines through the Cellosaurus Home Page by selecting "Contact" on the top panel menu.



3. Fill in the information and click Submit. The information that should be included in the request varies depending on if the cell lines are described in a publication.

Cell Lines Described in a Publication

Subject: Indicate that this cell line is described in a publication

Message: Provide a link to the publication where your cell line was first described

Cell Lines are NOT Described in a Publication

Subject: Indicate that this is a request to create a new Cellosaurus entry

Message: Provide the following information

- Name Species of origin (if not human, include strain/breed)
- Gender and age of donor
- Category of cell line (e.g., cancer, hybridoma, iPSC, ESC, etc.)
- If the donor is suffering from a disease, include the disease name



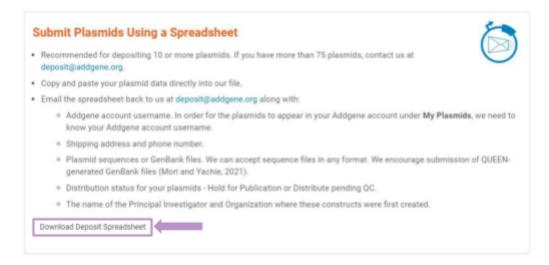


Plasmids

1. Visit Addgene.com and select "Deposit a Plasmid" on the home page



- 2. Scroll down to "Submit Plasmids Using a Spreadsheet"
- 3. Select "Download Deposit Spreadsheet"



4. Save the file as "Lab/PI Name_Addgene_BatchUpload" Example: SmithLab_Addgene_BatchUpload

Plasmid Name	Plasmid Type	Purpose	PubMed ID	Gene or insert Name	Alternative Gene/Insert Name 1	l	Entrez Gene ID	gRNA/shRNA Sequence	Insert Size	Species of gene or insert	Additional Species of gene or insert	Species Other	Relevant Mutations

If you are depositing more than 75 plasmids, you must email deposit@addgene.org BEFORE completing this spreadsheet.

5. Fill in the spreadsheet with as much information as possible.

Please review the REQUIRED information below:

- Plasmid Name
- Plasmid Type
- Purpose
- Gene or Insert Name
- Species of gene or insert
- Relevant Mutations
- Backbone Name

- Primary vector type
- Cloning Method
- Bacterial Resistance
- High or Low Copy
- Growth Temperature
- Growth SStrain
- Hazardous
- Patents or licenses
- 6. Upon completion, email the following to deposit@addgene.org
 - a. Completed spreadsheet
 - b. Any plasmid sequence files, maps, and/or GenBank files; each file name containing the provided plasmid name
 - c. Shipping address for Addgene to send a Deposit Kit
 - d. Name of Principal Investigator and Organization where the constructs were first created
 - e. Addgene account username (optional: include this information if you want the plasmids to appear in your account under "My Plasmids"



Mice

- 1. Register mouse strains with Mouse Genome Informatics (MGI) by visiting http://www.informatics.jax.org/mgihome/submissions/amsp-submission.cgi
- 2. Fill in contact details

M	lutant Alleles,	Strains,	and	Phenotypes	Submission	Form
Contact Details:						

Last name:	Street Address:
First name (& middle initial): *	City:
E-mail address:	State/Province:
E-mail address (repeat): *	Postal Code:
Principal Investigator:	Country:
Institute/Organization:	Telephone:
	Fax:
Select publication preference Citing your data:	
Citing your data:	
Are your data published? ○ yes ○ no	
If no, would you prefer that your data: O be pu	blic at the MGI website now $ igcirc$ be held private until publication
Provide reference(s) or PubMed IDs for published of	data or authors & descriptive title for unpublished data:
If data are available from a website, please list UR	L:
4. Provide any additional information	n by selecting the appropriate Purple heading
Choose information type(s) to sub-	

File Submissions Submit data files (e.g. images, text files, Excel, or bulk data)

5. Provide any additional comments. Click 'verify'

Strain Register a new mouse strain

Allele Name and describe a new allele, mutation, or transgene

Phenotypes Submit phenotype data for given genotypes



6. For Alleles, provide the following:

Examples: C57BL/6J, 12992/OlaHsd) **For hints on mutant allele nomenclature, see Quick Guide to Nomenclature for Alleles and Mutations. **Lab codes are available from ILAR (Institute of Laboratory Animal Resources). **If you would like assistance with allele nomenclature: Check the box here and continue with your submission. We will contact you about nomenclature for this mutation. 7. For Strains, provide the following: **Register a New Mouse Strain: ** = required field Enter a suggested strain name. When mutant alleles are part of the strain name, use < > to indicate the superscripted alleles. **Example: C57BL/6J-Kit **Example: C57BL/6J-Kit** **Should be entered as C57BL/6J-Kit<**U-39J>** **Enter the gene symbols corresponding to alleles carried on this strain. **Example: for the strain NOD/LtSz-Prkdc <scid>B2m<tmulunc>**, the gene symbols entered into this box would be Prkdc and B2m. ** **One gene symbol per line** ** ** ** ** ** ** ** ** **</tmulunc></scid>	his mutation is an allele of a know	mutation: *		
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For gene traps, specify the resulting mutant ES cell line:	For transgenes, specify transge	ne promoter:		
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8. For Phenotypes, provide the following:

Submit Phenotype Data: * = required field
Mutant allele(s) analyzed.
List one or more allele pairs analyzed in the animal (one allele pair per line, with the alleles comma separated). When entering mutant alleles, use < > to indicate the superscripted portion of an allele.
Example: If you phenotyped animals that were heterozygous for Kit^{W-39J} and homozygous for Tec^{tm1Welm} , they should be entered as
Kit <w-39j>, Kit<+> Tec<tm1welm>, Tec<tm1welm></tm1welm></tm1welm></w-39j>
Enter allele pairs of your phenotyped animals: *
[Find the correct allele symbol by searching MGI.)
Additional allele information not currently in MGI (allele synonyms, ES cell line, strain of origin, mutation type, molecular description, etc.):
Genetic Background: Genetic background can have a significant effect on phenotype.
Enter the Strain/Genetic Background on which phenotypes were analyzed: *
Other Strain/Background Information (e.g. specify crosses): Click here for an example.
 If you would like assistance with the Genetic Background Section: Check the box here and continue with your submission. We will contact you about determining the correct genetic background.
Phenotype:
Phenotypic Description (enter text, describing details of phenotypes observed, etc.): * Click here for an example. You may browse the Mammalian Phenotype Ontology and use these terms to describe the phenotype.
If this genotype + genetic background is a model for a human disease based on phenotypic similarity, please name the disease and include any associated information:
If this genotype + genetic background is a model for a numan disease based on phenotypic similarity, please halfe the disease and include any associated information.
Other known information (gene function/pathway, available clones, GenBank numbers, etc.) that will enhance these data:



9. For File Submission, provide the following:

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FΠ	e	SU	ıb	m	IS	SI	0	n	S	

You may submit a limited number of files using this form. Please limit file size to <5 MB. If you have larger files, or many files to submit, please contact us at: mgi-submissions@jax.org .
Are the file(s) that you submitted copyrighted? O yes O no If you have entered copyrighted information we will contact you.
Upload your data files (images, text descriptions, Excel, or text data): File 1: Choose File No file chosen Submit more files
See <u>examples and templates</u> for file submissions.
10. Select "Verify" to review and complete your submission
Completing your submission:
Are there any additional commments or information you would like to convey about your data?
Jse the buttons below to verify your data before submission or to reset the entire form. Thank you!
Verify Reset



Rats

- 1. Register rat strains with Rat Genome Database (RGB) by visiting https://rgd.mcw.edu/rgdweb/models/strainSubmissionForm.html?new=true
- 2. Provide Strain information

Strain Information				
Strain Symbol *				
Enter strain symbol				
			ion, please refer to the <u>rules for strain nomenclature</u> and olp naming your strain please contact <u>RGD.Data@mcw.edu</u>	
Туре		Genetic Status	Method	
mutant	~	Homozygous	CRISPR/Cas9	~
Other Method				
Enter modification method				
If you selected "other" as the method ab	pove, please specify the me	ethod you used here.		
Background Strain				
Enter background strain sy	mbol			
Provide a description of strain's				
	as used to introduce a 5-bp	deletion in exon 3 of the Spp1 gene of SHRSP/A3NCrl rat	embryos.	6
Reference/Pubmed ID				
Enter reference/pubmed ic	1			
If this strain has been mentioned in any	published paper please g	ive that citation here. (author, journal, vol, page number, o	or PMID).	
Research Use				
Eg: Cancer, Cardiovascula	ar, etc.			
Optional. If this strain has been or could such as reproduction.	d be used for research in a	particular area, please indicate this. For example, this cou	uld be a disease area such as cardiovascular or cancer, or a	phenotype category
ILAR Code				
Enter ILAR code				
This is the laboratory code assigned by originated and maintained.	The Institute of Lahor			
	The institute of Labor	atory and Animal Research to each lab or group. Regi	istering a group at ILAR identifies the group as a place where	this strain was
Upload image file if available	THE INSTITUTE OF EADOR	atory and Animal Research to each lab or group. Regi	istering a group at ILAR identifies the group as a place where	this strain was



3. Provide Gene/Allele information

Gene/Allele Information	
Gene Symbol	Gene RGD ID (if known)
Enter gene symbol	Enter gene RGD ID
Allele Symbol	Allele RGD ID (if known)
Enter allele symbol	Enter allele RGD ID
4. Indicate Availability	
Availability	
Current Status:	reserved Sperm
Where could this strain be obtained? *	
Availability Contact Email	
Availability Contact Enfail	
Availability Contact URL	
Provide Contact informati	on
Submitter Contact Details	
Last Name/Surname *	First Name *
Enter submitter last name/surname	Enter submitter first name/given name
Email Address *	
Enter submitter email address	
Laboratory PI	
Enter PI First Name & Last Name	
PI Email Address	
Enter PI email address	
Institution/Orgainzation	
Enter Institution or Organization name	



6. Provide any additional information and indicate preference for public sharing. At the time of publication, the strain will need to be public per ASAP Open Science Policies.

Additional Information	
	1
Additional Information about the STRAIN or ALLELE or GENE or any information you want to provide.	
Please let us know if you want this strain to be displayed on the RGD website. If not, check Non Public (we can hold a strain until instructed by you to release it).	
Public Non Public	
7. Confirm was not a rabat and submit	

7. Confirm you are not a robot and submit.

