IMPC Quick Reference Card
October 2013

What is?

iMITS – The IMPC Mouse Tracking System (http://www.mousephenotype.org/imits) is the central database for the planning and tracking of IMPC mouse production.

ES Cell – Embryonic Stem cell.

IKMC – The International Knockout Mouse Consortium. Aimed to mutate all protein-coding genes in the mouse using a combination of gene targeting and gene trapping in mouse ES cells.

Mouse Production status – Relates to the current status of mouse production in iMITS. They are listed below.

- Not Assigned for ES Cell Production - there is currently no plan yet to mutate a protein-coding gene in a mouse ES Cell clone.
- Assigned for ES Cell Production - there is currently a plan to produce an ES Cell clone.
- ES Cells Produced - ES Cell clone are available
- Assigned for Mouse Production and Phenotyping – A mutant strain will be produced and genotype confirmed
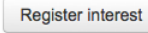- Mice Produced - A genotype confirmed strain has been produced.

Phenotyping status – Phenotyping centers register their attempt to phenotype a knockout mouse strain in iMITs.

- 'Attempt Registered' - means there is a plan for phenotyping for this strain.
- Started - means data have been produced and sent to the data coordination center for quality control.

IMPReSS - International Mouse Phenotyping Resource of Standardised Screens. Maintains and makes available IMPC standardised phenotyping protocols used across all of the participating mouse clinics.

How do I?

Get an IMPC account? Go to https://www.mousephenotype.org/user/register and create a new account. You'll receive confirmation e-mail with login details. You password can be reset on the same page.

Register my interest in a gene? Log in to your IMPC account. Search your favorite gene (see search section). Click on Register interest button. You'll receive update about mouse production status and phenotyping status for this gene.

Register my interest in a phenotype? This feature is not yet available.

Download phenotype data? Data can be downloaded from the gene, phenotype and graph pages of the portal. RESTFul APIs are also available for software developers. See download section.

Search

https://www.mousephenotype.org/data/search

Gene – Enter a mouse/human gene symbol, gene name, MGI accession number in the search box. Example: 'Cib2', 'TNIK', 'vasopressin'.

Gene	Mouse Production Status	Phenotyping Status	Register for Updates
Cib2 *synonym: calcium binding protein Kip2, 2810434I23Rik, AI449053* *name: calcium and integrin binding family member 2* *human ortholog: CIB2*	Mice Produced	Started	Login to register interest

Phenotype – Enter a mammalian phenotype term, definition, or MP accession. Click on the phenotype facet. Examples: 'immune system', 'increased hematocrit', 'MP:0008259'.

Phenotype	Definition
increased hematocrit	greater than average percentage of a volume of a blood sample occupied by red blood cells

Anatomy – Enter a mouse anatomy term or accession. Click on the anatomy facet. Examples: 'cerebellum', 'MA:0000198'.

Phenotyping procedure – Enter an IMPReSS procedure / parameter name. Click on the procedure facet. Examples: 'Grip Strength', 'LacZ', 'Hematology', 'IMPC_HWT_001'.

Parameter	Procedure	Pipeline
White blood cell count	Hematology	IMPC Pipeline
Red blood cell count	Hematology	IMPC Pipeline
Hemoglobin	Hematology	IMPC Pipeline
Hematocrit	Hematology	IMPC Pipeline
Mean cell volume	Hematology	IMPC Pipeline
Mean corpuscular hemoglobin	Hematology	IMPC Pipeline
Platelet count	Hematology	IMPC Pipeline
Equipment ID	Hematology	IMPC Pipeline
Equipment manufacturer	Hematology	IMPC Pipeline
Equipment model	Hematology	IMPC Pipeline

Phenotyping images - Enter a gene, an anatomical term, a phenotype or a procedure. Examples: 'Akt2', 'Xray', 'trunk', 'cardiovascular', 'immune system'.

Name	Image
Procedure: Xray **Gene**: Akt2	
Procedure: Xray **Gene**: Akt2	
Procedure: Xray **Gene**: Akt2	