## **Resource Summary Report**

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# **EUCOMMTOOLS**

RRID:SCR\_000676 Type: Tool

**Proper Citation** 

EUCOMMTOOLS (RRID:SCR\_000676)

## **Resource Information**

URL: http://www.knockoutmouse.org/about/eucommtools

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**Description:** Functional Annotation of the Mouse Genome, it will complete the International Knockout Mouse Consortium (IKMC) resource of mutations for all protein coding genes. Furthermore, it will maximize the utility of the conditional IKMC resource by generating up to 250 different, mostly inducible Cre driver mouse lines. In addition, EUCOMMTOOLS will develop novel tools to enhance the versatility of the IKMC resource. EUCOMMTOOLS vectors, mutant ES cells and mutant mice are distributed worldwide: EUCOMMTOOLS mutant ES cells and vectors can be obtained from the European Mouse Mutant Cell Repository (EuMMCR). EUCOMMTOOLS mutant mice are archived and distributed by the European Mouse Mutant Archive (EMMA). Knockout-first Mutant Alleles: EUCOMMTOOLS will create 3500 C57BI/6 conditional mutant alleles for single-exon (or otherwise previously conditionally untargeted) protein-coding mouse genes. These alleles will be made predominantly by introducing an "artificial intron", containing a standard EUCOMM promoterdriven targeting cassette, into the coding sequence of the single-exon gene. Cre Resources: EUCOMMTOOLS will engineer 500 new Cre C57BI/6 ES cell lines by Cre knock-ins into genes with useful expression patterns. The resource will be made with inducible forms of Cre recombinase such as CreERT2. Up to 250 lines of Cre driver mice on a pure C57BI/6N background will be generated and the Cre expression patterns documented and annotated in day P14 and P56. These mice will form a matched Cre driver resource for C57BI/6N mice produced from conditional IKMC resources. Research, Technology and Complementary Reagents: EUCOMMTOOLS will develop novel technologies to add value, depth and flexibility to existing IKMC ES cell and mouse resources. Key areas include: \* Development of novel recombinase based regulatory switches \* Exploration of zinc-finger nuclease stimulated homologous recombination strategies in fertilized oocytes \* Development and validation of complementary modular vector reagents which enable the construction of new useful knock-in alleles such as fluorescent and other reporters, site specific recombinases,

and mutant cDNAs. These novel alleles can be constructed either by re-utilizing existing IKMC modular vector resources or directly modifying existing targeted IKMC ES cell lines by RMCE.

#### Abbreviations: EUCOMMTOOLS

**Synonyms:** EUCOMM - Tools for Functional Annotation of the Mouse Genome, EUCOMM: Tools for Functional Annotation of the Mouse Genome

**Resource Type:** biomaterial manufacture, service resource, production service resource, material service resource

**Keywords:** genome, annotation, function, mutation, protein coding gene, vector, mutant embryonic stem cell, mutant mouse strain, cre driver, cre, recombinase, c57bl/6, allele, embryonic stem cell line, c57bl/6n, knock-in

**Funding:** European Union ; FP7 ; THEME Health

Resource Name: EUCOMMTOOLS

Resource ID: SCR\_000676

Alternate IDs: nlx\_152804

**Record Creation Time:** 20220129T080202+0000

Record Last Update: 20250501T080419+0000

## **Ratings and Alerts**

No rating or validation information has been found for EUCOMMTOOLS.

No alerts have been found for EUCOMMTOOLS.

## Data and Source Information

Source: SciCrunch Registry

## **Usage and Citation Metrics**

We found 1 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>ASWG</u>.

Bradley A, et al. (2012) The mammalian gene function resource: the International Knockout Mouse Consortium. Mammalian genome : official journal of the International Mammalian

Genome Society, 23(9-10), 580.