

Lypd5 Cas9-KO Strategy

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Project Overview

Project Name

Lypd5

Project type

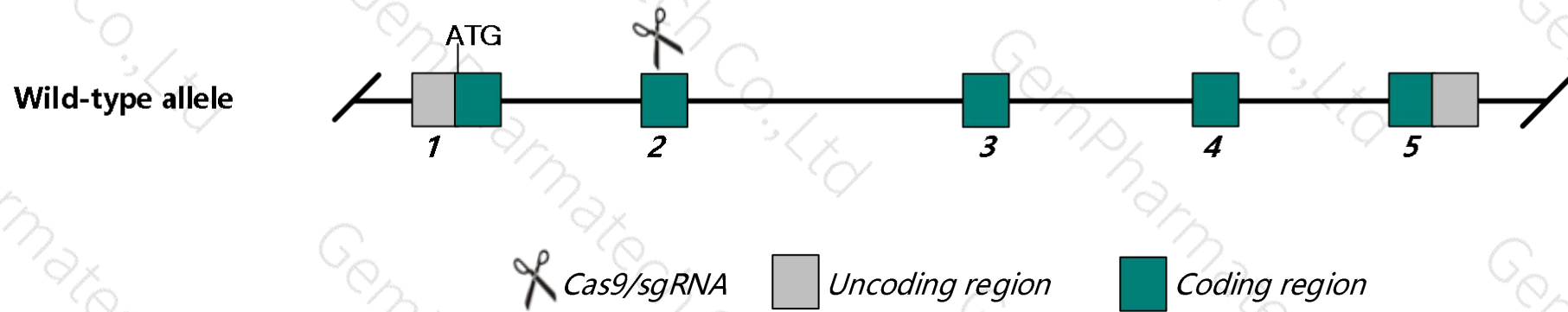
Cas9-KO

Strain background

C57BL/6N

Knockout strategy

This model will use CRISPR/Cas9 technology to edit the *Lypd5* gene. The schematic diagram is as follows:



- In this project we use CRISPR/Cas9 technology to modify *Lypd5* gene. The brief process is as follows: sgRNA was transcribed in vitro. Cas9 and sgRNA were microinjected into the fertilized eggs of C57BL/6N mice. Fertilized eggs were transplanted to obtain positive F0 mice which were confirmed by PCR and sequencing. A stable F1 generation mouse model was obtained by mating positive F0 generation mice with C57BL/6N mice.

- The *Lypd5* gene is located on the Chr7. If the knockout mice are crossed with other mice strains to obtain double gene positive homozygous mouse offspring, please avoid the two genes on the same chromosome.
- This Strategy is designed based on genetic information in existing databases. Due to the complexity of biological processes, all risk of the gene knockout on gene transcription, RNA splicing and protein translation cannot be predicted at the existing technology level.

Gene information (NCBI)

Lypd5 Ly6/Plaur domain containing 5 [*Mus musculus* (house mouse)]

Gene ID: 76942, updated on 12-Aug-2019

Summary

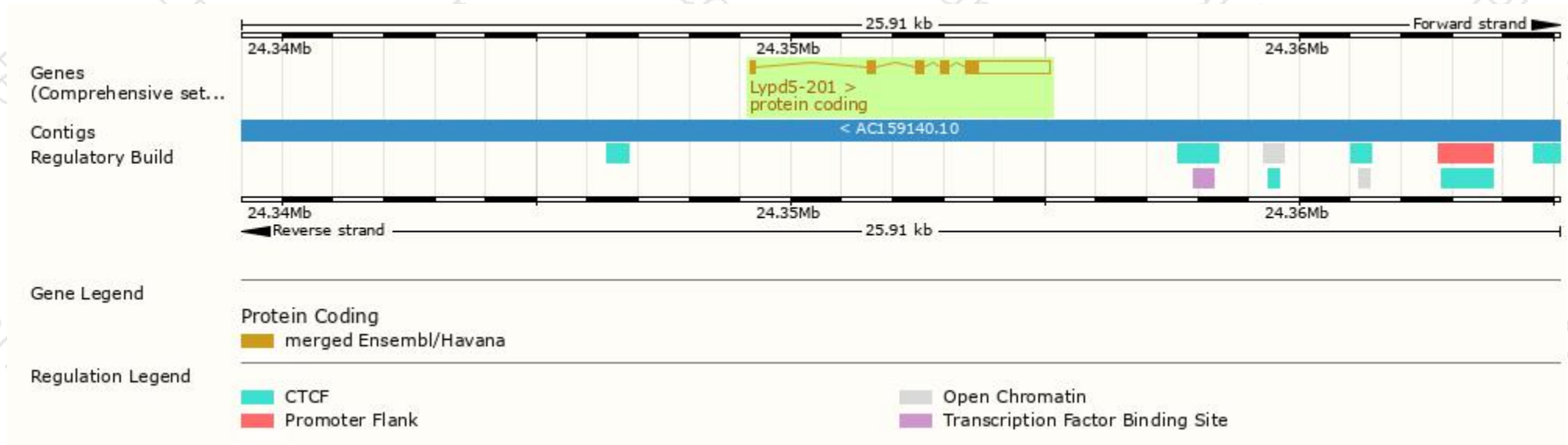
Official Symbol	Lypd5 provided by MGI
Official Full Name	Ly6/Plaur domain containing 5 provided by MGI
Primary source	MGI:MGI:1924192
See related	Ensembl:ENSMUSG00000030484
Gene type	protein coding
RefSeq status	VALIDATED
Organism	Mus musculus
Lineage	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Myomorpha; Muroidea; Muridae; Murinae; Mus; Mus
Also known as	2210003I03Rik; 2310011E23Rik
Expression	Restricted expression toward stomach adult (RPKM 98.3) See more
Orthologs	human all

Transcript information (Ensembl)

The gene has 1 transcript, all transcripts are shown below:

Name	Transcript ID	bp	Protein	Biotype	CCDS	UniProt	Flags
Lypd5-201	ENSMUST00000032683.5	2239	256aa	Protein coding	CCDS39830	Q9D7Z7	TSL:1 GENCODE basic APPRIS P1

Genomic location distribution



If you have any questions, you are welcome to inquire.

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