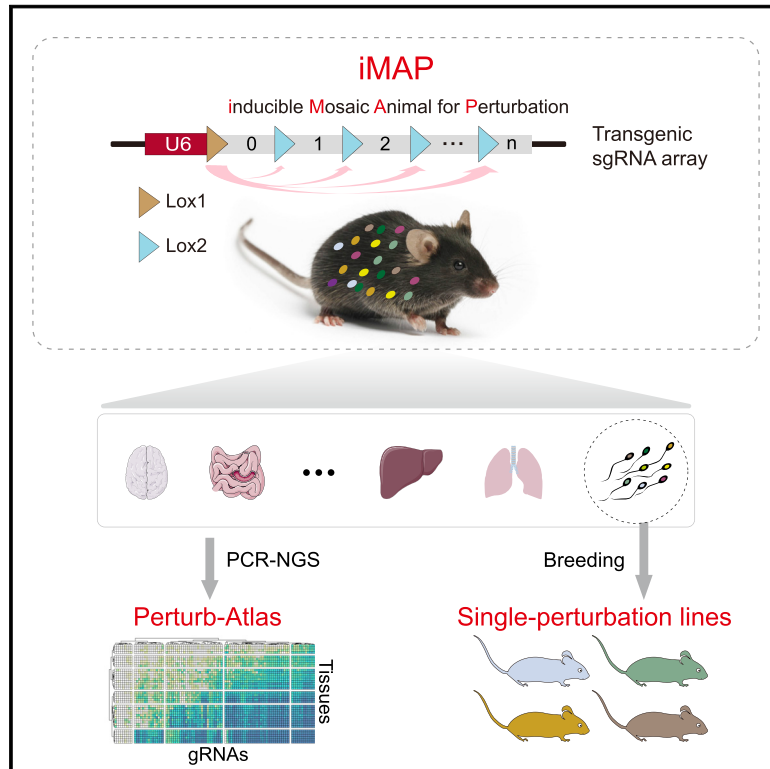


Large-scale multiplexed mosaic CRISPR perturbation in the whole organism

Graphical abstract



Authors

Bo Liu, Zhengyu Jing, Xiaoming Zhang, ..., Chao-Po Lin, Xingxu Huang, Tian Chi

Correspondence

chitian@shanghaitech.edu.cn

In brief

iMAP is a multiplexed mosaic *in situ* gene-perturbation platform, which enables large-scale mapping of the Perturb-Atlases profiling genome function across the whole body and high-throughput derivation of single-gene perturbation mouse lines.

Highlights

- Inducible mosaic animal for perturbation (iMAP) combines Cre-LoxP and CRISPR-Cas
- iMAP enables large-scale *in situ* multiplexed mosaic gene targeting and Perturb-Atlas mapping
- iMAP enables rapid derivation of single-gene perturbation mouse lines via breeding
- iMAP lines are permanent resources just as conventional transgenic lines



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