DRSC/TRiP and DRSC-BTRR Office Hours
in vivo CRISPR technologies
Oct. 18, 2021

TRiP CRISPR webpages:
https://fgr.hms.harvard.edu/vivo-crispr-0
https://fgr.hms.harvard.edu/crispr-fly-stocks-and-vectors

Find CRISPRs online resource for sgRNA designs:
https://www.flyrnai.org/crispr/

sgRNA tracker database and nominations page:
https://www.flyrnai.org/tools/grna_tracker/web/
https://www.flyrnai.org/tools/grna_tracker/web/nominate

Prime editing page:
https://fgr.hms.harvard.edu/prime-editing-reagents

Publications from our group:

Zirin et al. "Large-Scale Transgenic Drosophila Resource Collections for Loss- and Gain-of-Function Studies"
https://pubmed.ncbi.nlm.nih.gov/32071193/

Bosch et al. "Precise genome engineering in Drosophila using prime editing"
https://www.pnas.org/content/118/1/e2021996118

Bosch et al. "Gene Knock-Ins in Drosophila Using Homology-Independent Insertion of Universal Donor Plasmids"
https://pubmed.ncbi.nlm.nih.gov/31685521/

Jia et al. "Next-generation CRISPR/Cas9 transcriptional activation in Drosophila using flySAM"
https://pubmed.ncbi.nlm.nih.gov/29666231/

Ewen-Campen et al. "Optimized strategy for in vivo Cas9-activation in Drosophila"
https://pubmed.ncbi.nlm.nih.gov/28808002/

Ewen-Campen et al. "ovo D Co-selection: A Method for Enriching CRISPR/Cas9-Edited Alleles in Drosophila"
https://pubmed.ncbi.nlm.nih.gov/29934375/

Publications from other groups that came up in discussions:

Kanca et al. "An efficient CRISPR-based strategy to insert small and large fragments of DNA using short homology arms" (Bellen lab)
https://pubmed.ncbi.nlm.nih.gov/31674908/

FlyCRISPR webpage on knock-in of an attP site (O'Connor-Giles lab)
https://flycrispr.org/protocols/ssodn/

Nyberg et al. "A pipeline for precise and efficient genome editing by sgRNA-Cas9 RNPs

in *Drosophila*" (includes the small-eye marker phenotype-based strategy for distinguishing integration of the entire plasmid vs. intended knock-in)(Carthew lab)
https://www.tandfonline.com/doi/full/10.1080/19336934.2020.1832416

Addgene page for 'scarless' strategy knock-in plasmid (O'Connor-Giles lab)
https://www.addgene.org/80801/

Example use of “microORFs” to dampen down expression, in this case of Cas9 (F. Port/Boutros lab)
Port et al. "A large-scale resource for tissue-specific CRISPR mutagenesis in Drosophila"
https://elifesciences.org/articles/53865

Please feel free to contact us with additional questions, now or future.
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