

## *Co-Crispr injection*

Preparing injection mixture:

Add components of the injection mixture in the following sequence:

1. Cas9 0,5  $\mu\text{l}$  of 10  $\mu\text{g}/\mu\text{l}$  stock
2. Add tracr-5  $\mu\text{l}$  of 0,4  $\mu\text{g}/\mu\text{l}$  stock
3. Add crRNA-1,12  $\mu\text{l}$  of 1,  $\mu\text{g}/\mu\text{l}$  stock
4. Incubate this mixture at 37°C for 10 minutes before adding any DNA. Adding any double strand DNA before RNP complex formation reduces HDR efficiency
5. Add 1,6  $\mu\text{l}$  prl-3 roller plasmid of 500  $\text{ng}/\mu\text{l}$  stock
6. Add 1XTE buffer to bring the volume to 20  $\mu\text{l}$
7. To avoid needle clogging, centrifuge the mixture at max speed for 2 minutes, transfer about 17  $\mu\text{l}$  of the mixture to a fresh Eppendorf tube and proceed to loading the needle

### **Micro injection and screening:**

1. Inject 20-25 animals and transfer them onto individual plates (first time window). After 18-20h,

transfer the injected animals to the new plates  
(second time window)

2. After 2-3 days screen the Dpy, Dpy like, Roller phenotype from the first time window, pick the plates that segregate F1 Dpy-Roller and from these plates, pick about 8 F1 non Dpy-Roller and perform the lysis and genotyping after these animals have produced the F2 progeny