

UMMS Transgenic Animal Modeling Core Concentration of Reagents for CRISPR Targeting in Rodents

In order to undertake CRISPR-mediated gene targeting in fertilized mouse or rat oocytes, the TAMC requires the Investigator to prepare and deliver 25ul (or more) of the following mixture:

1. Cas9 mRNA @ 250ng/ul.
2. Guide mRNA(s) @ 100ng/ul each.

...and, if attempting a gene replacement or KI strategy....

3. ssOligo @ 500ng/ul each or dsDNA donor fragment @ 25ng/ul.

These concentrations constitute a 5X injection mix. The TAMC will dilute a portion of this supplied mixture in RNase-free water prior to injection. Providing the TAMC with 25ul of the mixture at these concentrations ensures sufficient reagents for zygote injections, and that the TAMC will use reagents at final concentrations proven to be the most effective in generating rodent models.

If you have trouble preparing sufficient reagents to match these listed concentrations, you may reduce the concentrations further, but please make sure the TAMC Core is aware of the new reduced concentrations.