



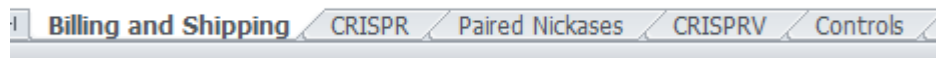
How to order:

Basic Knockouts

- 1) Use Sigma-Aldrich online CRISPR design tool to identify predesigned CRISPRs - <http://crispr.sigmainformatics.com/CrisprSearch>
 - a. Always best to use the NM_# or Gene ID
 - b. Designs listed by the exon they target.
 - c. Click on the 2 different tabs to find CRISPR or CRISPR Paired Nickases gRNA designs

Target ID	Gene Symbol	Gene ID	RefSeq ID	Target Exon	Species	Price (USD)
HS0000514122	TLR4	7099	NM_138554	1	Human	500
HS0000274444	TLR4	7099	NM_138557, N...	2	Human	500

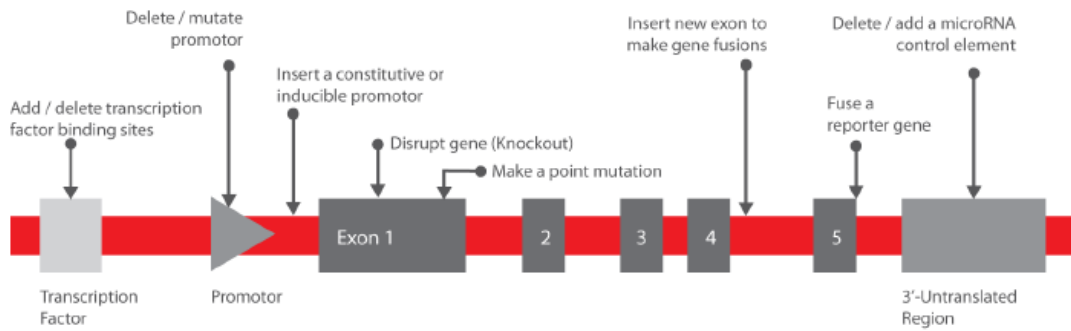
- 2) Open Sigma/GRCF CRISPR Order Form
 - a. Fill in “Customer Info”
 - b. Choose tab that contains the CRISPR format you are ordering and fill in the information – CRISPR (all-in-one, Cas9/gRNA), Paired Nickases, or CRISPRV (lentiviral format)
 - c. Don’t forget to indicate whether you would like any controls on the controls tab.



- 3) Send completed order form to customorders@jhmi.edu
 - a. Subject line “First initial. Last name CRISPR”

We suggest you purchase at least **2 gRNA** per target due to CRISPRs being shown to have a wide variation in their activity, even among multiple CRISPRs designed within close genomic proximity.

Custom project (Example: Inserting point mutant, inserting a tag, swapping out a promoter, inserting loxP sites, etc)



- 1) Fill out Custom CRISPR Form (add link to form)
- 2) Send completed form to customorders@jhmi.edu
- 3) Your form will be submitted to Sigma-Aldrich CRISPR design group. Michelle Laird, your Sigma rep, will deliver to you Sigma's top suggested designs and a price.
- 4) You will need to communicate with Michelle which designs you choose and she will work with GRCF DNA Services to process the order.