

FUNCTIONAL GENOMICS CORE FACILITY

Clone Delivery Instructions – February 2022

Clone Collections

The Functional Genomics Core Facility (FGCF) manages access to three libraries that belong to IRB Barcelona:

- 1. The Human MISSION shRNA library (Sigma).
- 2. The Mouse MISSION shRNA library (Sigma).
- 3. The Human ORF library (Open Biosystems).

Clone requests

In this zip you will find:

- An agreement letter that must be signed by the principal investigator of your research group.
- One excel file with the detailed contents of each library.
- One excel file to be filled with the details of the clones of interest

Constructs for specific genes can be queried by Name, or refseqID through the Excel Find/Search tool. Gene names follow the NCBI Entrez Molecular Sequence Database System nomenclature.

To make a clone request, please:

- E-mail the FGCF (genomics@irbbarcelona.org) with your request. Attach the signed agreement letter (only required once for each research group, please confirm with your PI or colleagues), and the request form with the details of your clone. If you want the clones on a specific date, please let us know in this first contact.
- 2. We will confirm your request and schedule clone delivery.
- 3. On the morning of the scheduled day, bring your LB tubes, along with the signed agreement letter and request form to the FGCF.
 - a. ORF clones: 3-5 mL LB + 50 µg/mL Spectinomycin.
 - b. shRNA clones: 3-5 mL LB + 100µg/mL Ampicillin.
- 4. We will send you and email once tubes are inoculated (generally in the afternoon of the same day). You can then pick up your tubes and grow the clones overnight at 37 °C.

Your acknowledgement matters! It helps us maintain operations!

We strongly recommend confirming the clones by Sanger-sequencing before starting any experiment. Not all clones in the collections have been validated and the ORF collection is a beta-test version without any Update since 2007.

Performance

In 2007 IRB Barcelona and Sigma_Aldrich partnerd to improve the MISSION shRNA libraries. Since then, we collect information on the performance of the clones. Please let us know if you have any issue with clone errors, growth, knockdown efficiency, etc.

Feedback from C. Mayor laboratory staff in 2021 informed up to seven catalog/plate missassignments in the ORF collection. This clone collection was a beta version before the commercial versions were made available. Errors are expected. If you need ORF clones, please:

- 1. Ask our staff to streak clones from the original (back-up) collection plates.
- 2. Sanger-Sequence your clones before deploying any experiment. Primer sequences follow in the attached documentation.

Why are clones priced?

Each year the FGCF streaks more than 400 clones for the IRB Barcelona community. Historically, storage, maintenance and management of these collections had been fully supported by the Functional Genomics Core Facility budget. In February 1 2022, a small fee was introduced to quantify the time allocated to the handling of clone requests.

Acknowledgements

Your acknowledgement matters! It helps us maintain operations and justify the costs that indirectly support your research! Please, include the Functional Genomics Core Facility in the Acknowledgements section of your publications and communications.