Care and handling of vector samples

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EVCF’s goal is providing a viral vectors of best possible quality. However, since viral samples may be quite sensitive to handling conditions, we would encourage you to read the following section in order to ensure that best experimental results are obtained with these samples.

Viral vectors handle and care

AAV

- Don’t store a viral sample longer than 1-2 weeks at 40C, as it may deactivate the virus.
- For a long-term storage it’s recommended to aliquot and freeze the original virus sample at -800C at minimal aliquot volume no less than 4 ul. Thaw aliquots on ice just before use.
- Avoid re-freezing the aliquots by careful planning of the experiment set up.
- As AAVs may aggregate or stick to a hydrophobic surfaces, it is important to store and freeze them in in a low protein-binding Eppendorf tubes and also use a low protein-binding tips.
- EVCF supplies a viral vectors in a special formulation buffer, that minimizes an aggregation and sticking of virions to the storage tubes. This buffer contains a high NaCl concentration and Pluronic F-68 additive. This buffer is available from EVCF free of charge for sample dilutions.

Lentiviruses

All AAV handling recommendations are applicable also for LVr samples, with an important addition: since LVr lipid envelop is very fragile, pipetting and mixing should be gentle and special care must be taken to avoid introduction of air bubbles.

DNA samples for viral production

When submitting a DNA samples for viral production, please note:

- To avoid possible viral DNA recombinations, we recommend to transform the LV and AAV transgene plasmids in the recombination deficient bacterial strain such as STBL3 and culture them overnight at 30°C with shaking.
- We encourage the researchers to submit their plasmids to our in-house DNA vector library.

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