

RNA sample preparation for mRNA- seq

1. Isolation of total RNA

The quality of the RNA to be used for RNA-seq is very important, we therefore highly recommend the Qiagen portfolio kit for total RNA extraction and purification.

2. RNA quantification, quality and preparation

When starting from **cell**, **tissue** or **whole blood** we would require total RNA matching these conditions:

- 10 ng as strict minimum (Recommended >100ng)
- 50µl maximum volume in RNAse-free water
- RIN>7
- Ratio of spectrophotometry measurement A260/A280>1.6 and A260/A230>1.6
- DNA-free RNA (treated with DNAse and purified)

Ideally, each freshly prepared sample should be split into **two tubes**:

- 1- One tube with 10ng of RNA to be used for initial QC
- 2- One tube with > 10ng of RNA to be used for library preparation