

# Sample Guidelines



These sample guidelines will help you to understand which material we can process and use in our assays. Furthermore, it gives an orientation how much material is needed for the different analyses and therefore should be shipped.

Please note that we perform a quality control on incoming samples and therefore always need 5µl extra material.

Primary material	Bone marrow puncture: 5-10 ml Blood collection: 5-10 ml Liquid biopsy > 5-10 ml Cryopreserved cells (transport on dry-ice): 5 mio cells Buccal swap: 1 swap fingernails: 5 cuts Paraffin sections: 1-2 slices or rolls
Genome Sequencing	Sample type: genomic DNA Sample purity: 1.8-2.0 (OD260/280) Recommended quantity: 600ng – 1.2µg, >20ng/µl Resuspension buffer: water, EB, or low TE (<0.1 mM EDTA)
RNA Sequencing	Sample type: total RNA Sample purity (protein contaminants): 1.8-2.0 (OD260/280) Sample purity (other contaminants): >1.5 (OD260/230) Sample integrity: RIN >5 Recommended quantity: 750ng, >50ng/µl Resuspension buffer: nuclease-free water Transport: on dry-ice
Exome Sequencing	Sample type: genomic DNA Sample purity: 1.8-2.0 (OD260/280) Recommended quantity: 600ng, >20ng/µl Resuspension buffer: water, EB, or low TE (<0.1 mM EDTA)
Targeted Sequencing	Sample type: genomic DNA Sample purity: 1.8-2.0 (OD260/280) Recommended quantity: 600ng, >20ng/µl Resuspension buffer: water, EB, or low TE (<0.1 mM EDTA)
Methylation Sequencing	Sample type: genomic DNA Sample purity: 1.8-2.0 (OD260/280) Recommended quantity: 800ng, >20ng/µl Resuspension buffer: water, EB, or low TE (<0.1 mM EDTA)
Sequencing only	The required pool concentration depends largely on the assay used and the flow cell targeted. Therefore, a few typical examples are given below: WGS Pool, S4 Flow cell: >15ng/µl, >35µl WTS Pool, S2 Flow cell: 5ng/µl, >15µl WES or Panel Pool, S2 Flow cell: 5ng/µl, >15µl WES or Panel Pool, S1 Flow cell: 4ng/µl, >15µl