

Sample Submission Guideline

Instructions

Fill out the Sample Submission Form excel sheet:

Make sure that upon labeling your samples, the name on the excel sheet matches the name printed on the vial of your sample. Send completed sheet along with the samples.

Prepare samples:

For each sample, collect $7-10 \times 10^6$ cells after drug treatment (~70-80% confluency at time of collection) in 1 mL of complete media + 10% DMSO in cryovials and freeze to -80°C with isopropyl alcohol (e.g. in a Mr. Frosty freezing container). Keep samples in -80°C until ready to ship.

Treatment of cells with a caspase inhibitor is suggested alongside of drug treatment if there is a significant apoptotic cell fraction. Cells displaying greater than 10% gH2AX positive non-apoptotic fraction are ideal. Submission of biological replicate samples of each condition and of vehicle-treated negative controls are highly recommended.

If customers choose to follow up on their own with NGS or qRT-PCR on BrITL-processed samples, BreakSight will return to customers a 1.5 mL Eppendorf tube of purified DNA break fragments in 50 μL TE buffer (retrieval) and a 1.5 mL Eppendorf tube of genomic DNA in 100 μL TE buffer (input) that are derived from each BrITL-processed sample. Turnaround time is 5-7 business days after receipt of samples per 1-12 sample batch.

Sonication of BrITL samples to an appropriate fragment size and library preparation is necessary prior to NGS of BrITL-processed samples.

If NGS is requested on BrITL samples (DDsite):

BreakSight will ship customer's BrITL-processed samples (retrievals and inputs will henceforth be considered as separate samples) to an NGS provider directly from our facilities. The NGS provider will perform sample QCs, sonication, library preparation, and 150 bp paired-end sequencing to generate 60 million read-pairs per sample. Turnaround time is 5 weeks.

If Bioinformatics is requested (DDinsight):

BreakSight will perform bioinformatics analysis on customer's NGS-generated FASTQ files to call statistically significant peaks for each sample and condition through its pipeline. Data files that include quality checks and analysis results will be sent to customers.

For best interpretive results, retrieval and input FASTQ data from two biological replicates per condition are recommended, including from two biological replicates of vehicle-treated samples (negative control).

Submit samples:

Please ship samples overnight on dry ice to:

BreakSight, Inc
7540 Windsor Drive
Suite 210
Allentown, PA 18106

Include printed excel sheet listing samples and services requested. Email tracking number of shipment to nishita.shastri@breaksight.net at the time of shipment.

**Samples may only be shipped during Mon-Thurs for overnight delivery to be received no later than 1pm the following day.*