

# Resource Summary Report

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## Guide RNA Library Transduction of Cas9 Cancer Cell Lines

DOI:10.17504/protocols.io.bg2njyde

Type: Protocol

### Proper Citation

Verity Goodwin, Emily Souster, Charlotte Beaver, Adam Jackson, Rizwan Ansari, Mathew Garnett, Fiona Behan 2020. Guide RNA Library Transduction of Cas9 Cancer Cell Lines. protocols.io [dx.doi.org/10.17504/protocols.io.bg2njyde](https://dx.doi.org/10.17504/protocols.io.bg2njyde)

### Protocol Information

**URL:** <https://dx.doi.org/10.17504/protocols.io.bg2njyde>

**Authors:** Verity Goodwin, Emily Souster, Charlotte Beaver, Adam Jackson, Rizwan Ansari, Mathew Garnett, Fiona Behan

**Group:** Cellular Generation and Phenotyping

**Summary:** This protocol is for the whole-genome CRISPR screening of stably expressing Cas9 cancer cell lines in triplicate using the commercially available Kusuke Yusa v1.1 whole genome gRNA library. It can be adapted for other gRNA libraries, under the assumption that there is a BFP reporter in the gRNA library. The protocol can be followed assuming the following is known:- The number of cells to be transduced - The number of days required for screening- How many cells to maintain throughout the screen- The number of cells required per pellet- The required coverage of the libraryThis protocol takes 16 days.Process diagram:

**Affiliations:** Wellcome Sanger Institute, Wellcome Sanger Institute, Wellcome Sanger Institute, Wellcome Sanger Institute, Wellcome Sanger Institute, Wellcome Sanger Institute, Wellcome Sanger Institute

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