**Condition codes:**

1 1A K562 sgControl

2 1B K562 sg*CDS2*

3 2A MCF7 sgControl

4 2B MCF7 sg*CDS2*

5 3A NCI-H2030 sgControl

6 3B NCI-H2030 sg*CDS2*

7 4A LPS141 sgControl

8 4B LPS141 sg*CDS2*

9 5AN SK-MEL-2 SgControl Extended Culture

10 5AO SK-MEL-2 SgControl

11 5BN SK-MEL-2 sg*CDS2* Extended Culture

12 5BO SK-MEL-2 sg*CDS2*

**Example:**

mageck test -k input.txt -t Negative1,Negative2 -c Positive1,Positive2 --norm-method control --pdf-report --gene-lfc-method secondbest -n PD1 --control-sgrna Controls.txt --normcounts-to-file

**1A v Brunello comparison:**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 1A -c Brunello --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_1AvBrunello --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**2A v Brunello comparison:**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 2A -c Brunello --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_2AvBrunello --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**3A v Brunello comparison:**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 3A -c Brunello --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_3AvBrunello --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**4A v Brunello comparison:**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 4A -c Brunello --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_4AvBrunello --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**5AN v Brunello comparison:**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 5AN -c Brunello --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_5ANvBrunello --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**1B v Brunello comparison:**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 1B -c Brunello --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_1BvBrunello --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**2B v Brunello comparison:**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 2B -c Brunello --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_2BvBrunello --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**3B v Brunello comparison:**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 3B -c Brunello --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_3BvBrunello --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**4B v Brunello comparison:**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 4B -c Brunello --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_4BvBrunello --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**5BN v Brunello comparison:**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 5BN -c Brunello --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_5BNvBrunello --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**1B v 1A comparison**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 1B -c 1A --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_1Bv1A --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**2B v 2A comparison**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 2B -c 2A --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_2Bv2A --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**3B v 3A comparison**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 3B -c 3A --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_3Bv3A --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**4B v 4A comparison**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 4B -c 4A --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_4Bv4A --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**5BN v 5AN comparison**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 5BN -c 5AN --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_5BNv5AN --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file

**5BO v 5AO comparison**

mageck test -k 20220927\_Brunello\_Input\_Mageck.txt -t 5BO -c 5AO --norm-method control --pdf-report --gene-lfc-method secondbest -n 20220927\_5BOv5AO --control-sgrna 20220927\_Non-targeting-controls.txt --normcounts-to-file